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EDUCATIONAL SCREEN

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THE EDUCATIONAL SCREEN
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Photo courtesy U. S. Merchant Marine Cadet Basic School, San Mateo, California, shows Spencer Model VA Delineascope for lantern slide and opaque projection.

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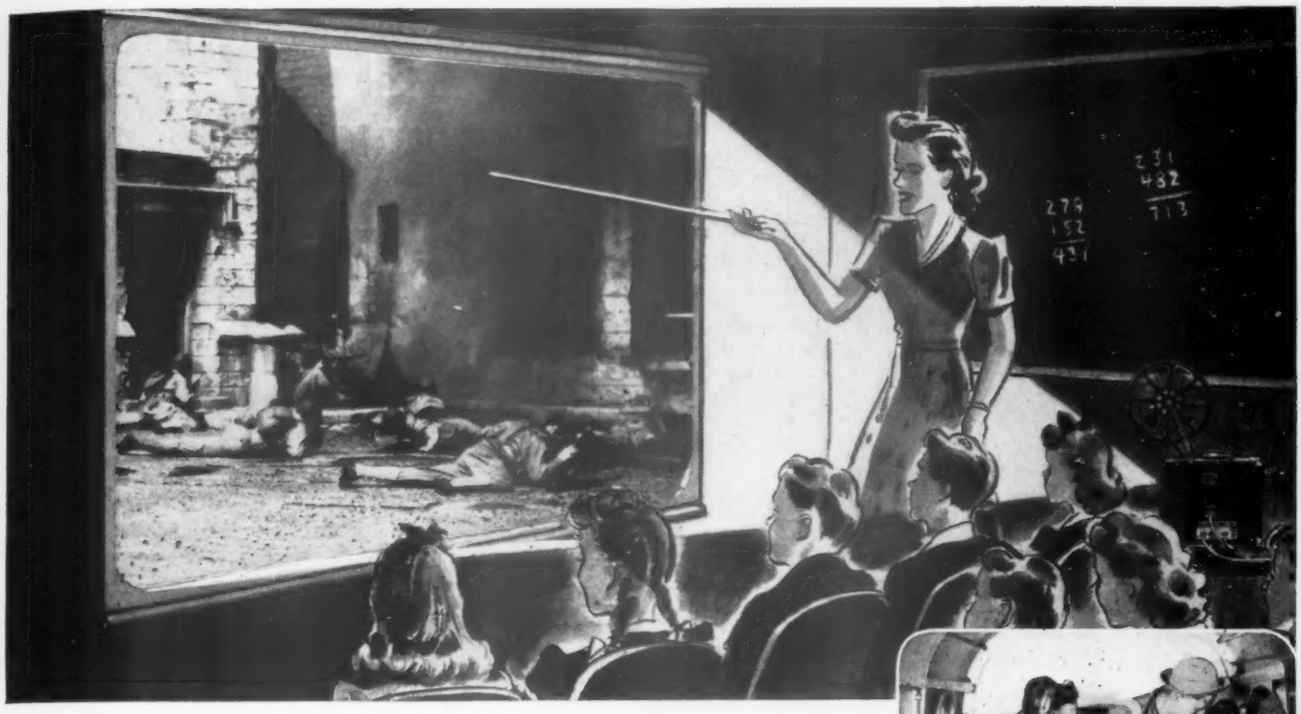

Scene on screen and picture above are Official Army Air Force photographs

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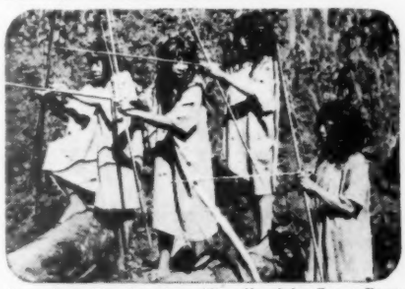

Scene from The American Nile *filmed by Count Byron de Prorok. It tells the story of the decadence of the ancient Mayan civilization.*

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Miscellany of the Month

Events and Achievements

VISUAL education meetings scheduled for July are:

Department of Visual Instruction at Pittsburgh, Pa., July 4, when the 1944 Representative Assembly of the NEA opens its conference.

Conference on Audio-Visual Aids, held by the Visual Aids Service, University of Illinois, Urbana, July 11-13.

Audio-Visual Institute, University of Wisconsin, Madison, July 17-22.

Sixth Midwestern Forum on Visual Teaching Aids at Bellfield Hall, University of Chicago campus, July 21-22.

Further data on these programs will be given in the June issue.

• The "first film made expressly for television presentation," says Will Bishop, MGM publicity director, is titled "Patrolling the Ether" and was shown on April 10th to a trade audience by Zenith Television Station W-9XZV.

• The Federal Communications Commission has received 109 applications, so far this year, for new broadcasting stations. Of these, 66 were for Frequency Modulation, 25 for Television, and only 18 for standard broadcasting. Many think this points the trend of the future.

• Uruguay showed the Sonja Henie pictures. But Uruguay has no ice. So a wave of frantic roller-skating swept Uruguay. "Trade follows the films," remarked Motion Picture Herald.

• De Mille's technicolor war saga, "The Story of Dr. Wassell," was given a brilliant preview in the nation's capital before top-ranking Army, Navy, Marine Corps Officers, Congressmen, Senators, Supreme Court Justices, and social leaders of the District of Columbia. Receipts of $25,000.00 went to the Navy League's Red Cross Fund.

• An elaborate and unique exhibit—arranged at Dartmouth College for Navy trainees and other students—presents the complete history of the three-dimension picture: From the invention of the stereoscope by Oliver Wendell Holmes and rare stereoscopic photos taken before the Civil War—through the hey-day of its social success when the stereoscope replaced the family album for home entertainment, showing a completely furnished model of a Victorian parlor—and down to the present-day Vectograph which, through polarized spectacles, is teaching the Armed Forces air photography, geometry, map-making and other wartime subjects.

• An Army film—"The Negro Soldier" (4 reels), a Frank Capra production, written and supervised by a negro, Carlton Moss, who also plays a leading role—is a social documentary of high interest and of more than wartime potentiality. It pleases the negroes. It can make white people think, even change their attitudes. It is now being released to theatres through the War Activities Committee, and a 16mm version will be available June 15th through the OWI.

Surveys and Statistics

ACCORDING to the Wendt Report:

The Army has 50 to 75 Directors of Visual Aids; 250 Libraries of audio-visual materials; and 250 copies of each film produced. The Signal Corps produced 270 films in 1943 alone—its total production for the war being nearly 1000 films, which is five times the films made by Erpi in a decade and over. But cost-per-film is higher than Erpi's.

• The Will Hays Report says:

In 1943 theatres sold over $770,000,000, in War Bonds, and personal appearances by stars another $1,337,000,000—total over $2,000,000,000. Theatres collected $3,000,000 for the Red Cross, $1,600,000 for the United Nations Relief, and $2,000,000 for the March of Dimes.

Further data are that 417 features and 449 short subjects were released in 1943 . . . that Teaching Films Custodians Inc., a branch of the Motion Picture Producers and Distributors of America, now has a library of 6000 16mm short subjects for the use of schools (!) . . . and that 1307 new reels were added in 1943 (!) . . . that the Industry's main functions are "entertainment, information, inspiration," education not mentioned.

• The Commission on Motion Pictures in Education has started spending the $100,000.00 given it by the Motion Picture Industry. It will first "survey the post-war application of films to the schoolroom," then recommend a "program of specialized teaching film production," then tell how to "integrate visual education with school curricula," and then will consider the sources of teaching film production—(1) the organized entertainment film industry, (2) commercial producers, (3) specialized educational producers. As to which will emerge as the major source of teaching films, the field can only await the Commission's conclusions. At present it appears that, after analysis of the Teaching Films Custodians achievements so far, "several of the Commission members believe that this record points the way toward even greater use of Hollywood product." The ultimate findings of the Commission should be of extraordinary interest to the educational field!

• The over-all record total attendance on a single picture is announced as 51,000,000 for "Gone with the Wind." Some five million saw it twice, a half million three times.

• Comparative motion-picture theatre figures for two years are interesting:

Gross admissions (without tax) for
1942.....$1,193,400,000
1943.....$1,363,250,000
Average ticket price for
1942.....25.5 cents
1943.....27.5 cents
Weekly ticket-buyers for
1942.....90,000,000
1943.....95,000,000
(But Gallup poll says about 65,000,000)

Plans and Predictions

FOUR of the many questions facing the television-planners are these: (1) Will the coaxial-cable method or the relay-station method prove better for nation-wide television broadcast? (2) Will television broadcasts be more economical and effective from film or from "live pickup"? (3) Will television news replace newsreels—or will newsreels be made as always and televised to reach the national audience more quickly than by distribution of prints to theatres? (4) William Fox poses another question—as to whether theatres will be turned into garages when real television comes.

• Televised News Programs from Press Association, Inc., radio affiliate of the AP, may be inaugurated this month through Filmedia, Inc. They will be summaries from news camera films.

• Bell Telephone plans post-war television development with 7000 miles of co-axial cable linking important cities, coast to coast, north to south, complete by 1950. First circuit, New York to Washington, ready in 1945. Another plan, by American Telephone and Telegraph Co., will construct micro-wavelength relay stations 30 miles apart between New York and Boston for regular television broadcast.

• One "expert" got into print (we mercifully withhold his name) with the wishful thought, emitted as prediction, that the post-war period will see "a good 16mm sound projector" available to schools at $25.00. (sic!). Such absurdity in print is a high disservice to the field. Maybe it was a misprint, we hope.

• There is much agitation in England toward the idea of having war projectors "given to schools after the war." Head of the Boys and Girls Cinema Clubs, J. Arthur Rank, and the director of Gaumont-British Instructional Ltd., Javal, are staunch promoters of the plan. A group of civic-minded Members of Parliament, headed by the educational expert, Kenneth Lindsay, are trying to amend the Government's Education Bill to require every school to install a projector. Javal's five-year plan, ending as the war began, aimed at a projector each in 21,000 English and Welsh schools. Final achievement, 500 projectors installed in the five years! Obviously the sales effort needs help. The proposed free disposal of war projectors will speed up results considerably.

• Wendell Willkie's "One World" will be produced by Darryl Zanuck for 20th Century Fox, of which Mr. Willkie is Chairman of the Board. Expected to cost about $3,000,000. Profits to be divided between the Wendell L. Willkie Fund, a charitable foundation, and Simon and Shuster, publishers of the book. At Mr. Willkie's request, the picture will not be shown until after the November elections.

The Coolidge Visual Aid Squad Functions

Full details on a highly efficient organization of student-operators for school projection.

DAVID F. CHASSY
Calvin Coolidge High School
Washington, D. C.

Above: Some members of the Coolidge Visual Aid Squad.
Left: Trainee taking projector examination under pressure.

AT Calvin Coolidge High School, Washington, D. C., we have a student organization which has done much to encourage the use of visual aids in the classroom. Our Visual Aids Squad, organized soon after the opening of the school in 1940, has won over many a faculty convert to the cause of visual education by the simple expedient of very definitely relieving the teacher of all responsibility for procuring and operating the necessary projection equipment.

For carrying on the program, we have portable projection equipment as follows: two 16mm. silent movie, one 16 mm. sound movie, two slide projectors, one opaque projector, besides 16 mm. stationary movie equipment in the auditorium booth. The portable equipment is used in any classroom where proper lighting conditions prevail. There is one room set aside for projection use exclusively.

The bulk of the visual instruction material comes from the centrally located Visual Instruction Library which serves the entire D. C. school system, on the primary, secondary, and collegiate levels. The material is sent by special messengers to each of the schools on a regular weekly schedule. Even during these trying times, the service is uninterrupted and very dependable. The task of the Visual Aid Squad is to integrate the above service with the visual instruction program at Coolidge.

Step 1. At the beginning of the school year, the Coolidge Visual Aids Office receives a catalogue from the D. C. Visual Instruction Library listing all materials available for the current year. This listing is periodically revised or supplemented. The Coolidge Visual Aids Office then prepares duplicate lists, classified by subject matter, and distributes these lists to the various departments throughout school, for permanent reference by every teacher in his own subject.

Step 2. The teacher consults this list periodically, selects items, prepares Form No. 1 and forwards to the Coolidge Visual Aids Office. (For example, see Form No. 1 as filled out by Mrs. Anderson on Monday, Dec. 6.) (Forms 1, 3, 5, 6, 7, are slips of standard 3x5 card size. Only Form 1 is shown here.)

Step 3. On Tuesday, Dec. 7, the Coolidge Visual Aids Office consolidates similar orders from other teachers throughout the school, and prepares Form No. 2 in duplicate. Both of these copies are mailed the same day to the D. C. Visual Aids Library, where they are "processed". The Visual Aids Library confirms the dates requested, or names substitute dates, and returns one copy thus processed to the Coolidge Visual Aids Office.

Step 4. By Friday, Dec. 10, the Coolidge Visual Aids Office is able to relay confirmations and substitutions from Form No. 2 to the teachers concerned. (On Form No. 3). When agreement is reached with teachers regarding substitution dates, the Visual Aids Office prepares Form No. 4, the Projection Squad Assignment Chart. Forms No. 2 and No. 4 are posted side by side on the bulletin board in the Visual Aids Office, headquarters for the Visual Aids Squad.

Step 5. On Monday morning, Dec. 13, the Visual Aids Squad operators consult Forms 2 and 4 for the operations scheduled. For example, the first operator assigned for Monday, Jane Miller, looks for the box next to her name. She will note the Key No. 89. She realizes, by a glance at both forms, that she is to operate a 3-reel silent movie, "From Clay to Bronze," in room 316, for Miss Fontanini.

Step 6. Our operator proceeds to room 316, where she finds the projector assembled, threaded, and focused. All Jane has to do is to flip the start

Form 1

PUBLIC SCHOOLS OF THE DISTRICT OF COLUMBIA
CALVIN COOLIDGE HIGH SCHOOL

To D.F.Chassy Room 115 V.A. OFFICE
From Mrs.Anderson Date Dec.6, 1943

Please order the following visual aids for me, and project same as indicated below. (Type desired circled)

SILENT FILMS	(SOUND FILMS)	SLIDES	STILLS
Title		Date	Periods
1. Vitamin D		Dec.17	1-3
2. Nursing		Dec.17	2-4
3.			

button at a signal from the teacher. No time is wasted. How does it happen that Jane finds all in readiness upon her arrival in room 316? This is because of the squad's co-operation.

You will note on the Assignment Chart that Jim Strand and William Sealfrank are assigned to the AM preliminary period. The boys are members of my home room class. Since my room adjoins the Visual Aids Office, it is a simple matter for them to attend to both their home room duties as well as their squad assignments. Next to Jim's name on the chart are the symbols which mean that Jim is responsible for the setting up of any silent projector scheduled for the first period, with its proper film, or any opaque projector. The symbols next to Bill's name similarly instruct Bill to set up a sound machine for the first period, whenever scheduled, or a stereopticon. This explains why everything was in readiness for Jane when she appeared in Room 316 the first period.

Step 7. As soon as Jane has completed showing reel 1 of Film No. 89 on the machine A, she will immediately start reel 2 on machine B, which has already been threaded and focused along with machine A. While reel 2 is running on machine B, Jane will rewind reel 1 from machine A, and thread that same machine with reel 3, which will be all set to go when reel 2 on machine 8 is completed. Likewise, while reel 3 is running on machine A, Jane will rewind reel 2 from machine B. Then she will thread machine B with reel 1, which you note was rewound a little while ago. When reel 3 is completed on machine A, the teacher takes over. Jane then carries on by rewinding reel 3 and threading machine A with reel 2. Thus both A and B machines are again in readiness for the second period under another operator, Don Witters. Of course, we assume that two silent machines were available for this period. When we use our single sound machine, we just don't synchronize. We have hopes. Incidentally, it is rare that Jane is required to project more than three reels dur-

Form 2

PUBLIC SCHOOLS OF THE DISTRICT OF COLUMBIA

Visual Aids Order to VISUAL INSTRUCTION LIBRARY Date . . . Dec. 6, 1943
From CALVIN COOLIDGE HIGH SCHOOL

Type	Key	Reels	Title	Teacher	Date Wanted	Periods Wanted	Dates Confirmed by Library
SOUND MOVIE							
	Key# 78	(1)	Circulation	Miss Wenchel	Dec 14	2,3,4,6	...✓...
	79	(1)	Foods-Nutrition	Miss Kent	Dec 14	1,5,7	...✓...
	80	(1)	Electrodynamics	Mr. Himes	Dec 15	1,3	...✓...
	81	(1)	Sound Acoustics	Mr. Himes	Dec 15	2,5,6	...✓...
	82	(3)	The City	Miss De Atley	Dec 15	4,7	...✓...
	83	(2)	Conservation	Miss Barkley	Dec 16	1,3,4,7	...✓...
	84	(1)	Chemical Reaction	Mr. Warren	Dec 16	2,5,6	...✓...
	85	(1)	Vitamin D	Mrs. Anderson	Dec 17	1,3	...✓...
	86	(1)	Nursing	Mrs. Anderson	Dec 17	2,4	.Jan.6
	87	(1)	Mexico, Arts	Miss Gunning	Dec 17	5,6,7	...✓...
SILENT MOVIE							
	Key# 88	(2)	The Silversmith	Mr. Jacoby	Dec 13	6,7	...✓...
	89	(3)	Clay to Bronze	Miss Fontanini	Dec 13	1,2,3,5	...✓...
	90	(1)	The Frog	Mrs. Barrett	Dec 14	1,3,5,7	...✓...
	91	(1)	Pond Insects	Mr. Chassy	Dec 14	2,4,6	...✓...
	92	(1)	Correct Shorthand	Mrs. Green	Dec 15	1,2,3,6	.Jan.4
	93	(2)	Eyes - Advanced	Miss Crigler	Dec 15	4,5,7	...✓...
	94	(1)	Yorktown	Miss Fairbanks	Dec 16	1,2,3,5	...✓...
	95	(2)	Asia Today	Miss Hanft	Dec 16	6,7	...✓...
SLIDES							
	Key# 96	(20)	Romeo and Juliet	Mrs. Sandefer	Dec 13	1,3,5,7	...✓...
	97	(24)	Tale of 2 Cities	Miss Taylor	Dec 13	2,4,6	...✓...
OPAQUE MACHINE							
	Key# 98		Misc Photographs	Miss Trufant	Dec 17	1,3,5,7	...✓...
	99		Misc photographs	Miss Walter	Dec 17	2,4,6	...✓...

ing any one period, generally less. Our teachers usually plan for a twenty to twenty-five minute program, which leaves the operator sufficient time to prepare for the next period. When Jane has completed preparations for the second period she will return to the V. A. Office, if there is still time; otherwise, she will proceed to her next class. If any emergency arises requiring my immediate attention Jane will report directly to me in my classroom.

Step 8. At the beginning of the second period, Don Witters reports to the V. A. Office, checks in, and proceeds to his assignment. Upon arrival in 316 Don will double check on his associate's preparations, and await the "go" signal from the teacher. At the end of the period all is in readiness for Howard Brooks to take over for the third period. And so it goes until the fifth period when Westerfield takes over. Westerfield notes on the Assignment Chart that although he is to project No. 89 during the fifth period, he must prepare No. 88 for his sixth period successor, Henry Porten. Therefore, before proceeding to room 316, he picks up film No. 88—"The Silversmith," scheduled for Mr. Jacoby's class. At the close of the 7th period showing of film No. 88, Norton Marshall will cart all the equipment back to room 115. Marion Boat, Inventory Clerk, will make his daily check (on form No. 5).

The Training of the Operators

Obviously, the synchronization of this student activity requires adequate training. Since I, myself, carry a full teaching program together with other miscellaneous extra-teaching responsibilities, I am in no position to take any active part in the training program. Therefore, we have developed a system whereby the more experienced squad members instruct the younger members in the "know how" of projection duties. The squad members are of three ranks—the senior members, the junior members, and the trainees. The senior members must have served effectively for at least two semesters, the junior members for one semester, before acquiring rank and title. Within each assigned period we try to have on duty one senior member, one junior member, and an occasional trainee. The senior member is responsible for the education of the trainee co-assigned with him for that period. For example, Don Witters is responsible for the training of Joe Neophyte, No. 2. Whenever Don and Joe are able to get together for a training session they take out the equipment and go over the details of good projection technique. The training is leisurely, but thorough. There is no urgent need of Joe's immediate service. Within a few weeks Joe is ready to operate the slide machine and the opaque machine. However, the training for the movie projectors is prolonged. Wit-

(*Continued on page 220*)

Form 4 **ASSIGNMENT CHART for CALVIN COOLIDGE SQUAD**

Period	Name	MONDAY Job	Room	TUESDAY Job	Room	WEDNESDAY Job	Room	THURSDAY Job	Room	FRIDAY Job	Room
Prelim.	Saalfrank, W. Strand, Jimmy	DEC 13 SD ST SL OP		DEC 14		DEC 15		DEC 16		DEC 17	
1	Miller, Jane Weiner, Irving Neophyte "Joe"	89 SL 316 96 ST 210		79 SD 316 90 SL 119		80 SD 225		83 SD 316 94 SL 206		85 SD 316 98 OP 206	
2	Witters, Don Booth, Mary Neophyte, "Joe"	89 SL 316 97 ST 208		78 SD 316 91 SL 115		81 SD 225		84 SD 327 94 SL 206		99 OP 202	
3	Brooks, Howard George, Joseph Neophyte, "Joe"	89 SL 316 96 ST 210		78 SD 316 90 SL 119		80 SD 225		83 SD 316 94 SL 206		85 SD 316 98 OP 306	
4	Harris, Dean Volkmer, Eldon Neophyte, "Joe"	97 ST 208		78 SD 316 91 SL 115		82 SD 316 93 SL 115		83 SD 316		99 OP 202	
5	Westerfield, E. Oehm, Fred Neophyte, "Joe"	89 SL 316 96 ST 210		79 SD 316 90 SL 119		81 SD 225 93 SL 115		84 SD 327 94 SL 206		87 SD 316 98 OP 206	
6	Porten, Henry Boone, Daniel Neophyte, "Joe"	88 SL 316 97 ST 208		78 SD 316 91 SL 115		81 SD 225		84 SD 327 95 SL 210		87 SD 316 98 OP 202	
7	Marshall, Nort Boat, Marion Neophyte, "Joe"	88 SL 316 96 ST 210		79 SD 316 90 SL 119		82 SD 316 93 SL 115		83 SD 316 95 SL 210		87 SD 316 98 OP 206	

SD, sound movie SL, silent movie ST, stereopticon OP, opaque machine

Teacher Education: When Do We Start? *

Presenting some shortcomings of teacher training in the audio-visual field, with suggested remedies.

EDGAR DALE

Bureau of Educational Research
The Ohio State University, Columbus, Ohio

YES, when do we start? My title is provocative rather than accurately descriptive. But are we yet past first base as far as teacher education is concerned? Since this is a matter of judgment and opinion let's set up some of the standards which describe an effective teacher education program.

1. *In an adequate teacher education program in the audio-visual field there will be a statement of necessary competencies and of the experiences necessary to achieve these competencies.*

I don't believe this standard is reached anywhere. You will find scattered literature on what constitutes competency in this field. A few have attempted to put these things down on paper. But I do not know of a college of education or teachers' college which insists upon a mastery of competencies in this field.

Yes, I know that we offer courses. And some of them are compulsory. But would anyone defend them on any ground other than that they make a good start? Are any of us telling prospective teachers that they aren't ready to teach yet because they haven't mastered some simple skills in using the blackboard? Must one have stated, definite competencies in the handling of excursions in order to get a teacher's certificate? Or be a skillful demonstrator of the meaning of fractions, of how to read a map, or how to use a rotary saw safely?

I'm not now saying that, once agreed upon these competencies, we should then teach them one by one out of the context of real, live teaching situations. Indeed it is only in rich, vital teaching situations that we can develop these competencies. Better teacher education in the audio-visual field means that we must improve the general quality of teacher education. More careful attention to the general problem of what constitutes the competencies of the effective teacher will help to such improvement.

2. *A good teacher education program in the audio-visual field will require that the entire college use audio-visual materials as a regular part of its teaching procedure.*

One of the common problems faced by teachers in schools is the previewing the recordings, films, film strips, or slides that they plan to use. Failure to preview is a common weakness. But if we had effective use of these materials on the college level, many of them would not only have been seen by the teacher but also used by her in practice teaching. Hasn't the time come when we should expect every teacher to have heard the best recordings in her field, seen the finest films, and used the best pictures before she has received a teacher's certificate?

How many colleges are making instructional use of Hollywood films—both features and shorts? Do many college students see films like "New Prisons—New Men," a *This Is America* release? Do they see "The World at War" which many of you own in the 16mm. version? Do students view the short version of "Magic Bullet?"

Are most college instructors skillful in the uses of the blackboard? Can they do simple drawing well? Do they turn readily to the blackboard to write down a technical term or to note the five or six points that they are making in their lecture. Some do. Many do not. Do most colleges use their bulletin boards effectively? Is the bulletin board in the library changed regularly? Is it attractive and inviting? If it is, students will imitate it when they develop their own bulletin boards.

Remember—we teach as we were taught, not as we were taught to teach. That's why progress is so slow. But to have an effective teacher education program in audio-visual materials, we must have an educational program that is audio-visually effective.

3. *An effective teacher education program requires a rich supply of teaching materials in the schools.*

Let's explore this a bit. A common unit in elementary geography is one dealing with China. Now, can I go into your school tomorrow and find there a file of excellent photographs on China itself, e.g., rice fields, temples, emphasis on manual labor, crops of various kinds? Or better still, would there be a file carefully classified under Industry, Transportation, Agriculture, Religion, and the like?

Will you also have easily available a large map or maps of China, by means of which these ideas just presented are clearly shown in their geographical context? Do you have large maps by means of which pupils can follow the Chinese war front? Would the map, for example, show the difficulty of access to China by land from Burma? Would it show the river valleys? The appropriate elevations and the like?

Would you have some recordings on China, perhaps Madame Chiang-Kai-Shek's speeches? Could you put your hands quickly on Pearl Buck's tribute to Sun Yat Sen in a recent *New York Times* magazine section? In other words, do you have at your finger tips a rich supply of teaching tools on this commonly taught unit or subject? Do you have a feast or a famine?

4. *Teachers in service must be regularly informed about new materials of instruction, given an opportunity to preview them and discuss problems of use with other teachers.*

If this situation does not obtain, we do not have an adequate system of teacher education. For, under no circumstances, can we assume that a four-year program of teacher-education, involving as it does far more study of subject matter than actual preparation for teaching, can give enough skills, enough information, enough attitude development to carry the student

*Address given at The Northern Ohio Visual Aids Conference in Cleveland, April 3, 1944.

through the rest of her teaching career. You simply can't have an effective teacher-education program in the audio-visual field unless you have a careful, consistent, in-service training program also.

One Approach to the Problem

We are developing a teaching aids laboratory at the Ohio State University. It isn't unique. Other schools have done a notable piece of work in this field. It is only through some such plan as this that we are ever going to make any progress in this field. Compulsory courses in audio-visual education won't do it. Exhortation won't do it. Even rich supplies and materials alone won't do it. There must be intelligent practice, too, supervised skillfully.

What should be the goals of a teaching aids laboratory? First, we must be a service agency for the college. We must understand that the failure to use audio-visual aids in college teaching has usually not been a lack of interest or any unfavorable attitude. Most instructors say that it is a good thing to use audio-visual materials. There is no active opposition. But each individual instructor cannnot carry forward the practice and investigation and study necessary to determine the available aids. He needs help. We have noted again and again that the average instructor who tries to use a film or recording catalog is baffled by the complexity of the offerings. Then he orders some of these materials and is often disappointed. He goes back to textbook teaching with certain misgivings.

That isn't all. Suppose he wants a certain film. He then has the laborious problem, not so complicated but very annoying, of arranging for his department to pay the dollar or two necessary for the film rental. He, or some one else, must write a letter. He must see that there is a projector available, check the film when it comes in, and the like. This is an impossible situation. Even when he has the projector and the film or whatever it is that has been ordered, he must arrange the projection and see that the room is properly darkened. This again is another chore, especially in many of our old college buildings. The result is that a series of tiny annoyances, and some not so tiny, have built up in the mind of the instructor a barrier against the use of this material.

The solution is simple. Instead of having *every* person do all this work, have *one* person do it. I know that you are saying, "Well, after all, that is what an audio-visual director does in a city school system." Yes, that is true, but we don't have many such persons in public school systems and we have still fewer of them in colleges and universities.

What I want to see, then, and we won't be successful in teacher-education until we have it, is a rich laboratory of teaching materials and teaching suggestions available to every member of a college faculty, and similar opportunities for every teacher in a school system. The war is going to hasten this. We have learned that if you are going to wage war, you have to have soldiers who are well taught and if you teach aerial gunnery or first aid or "Why we are in the war," you can turn very quickly, simply, to a film such as "Battle of Russia," to a chart dealing with a calibre-50 machine gun, to a map put out by the Morale Services Division of the War Department. Teaching tools and teaching materials are at your fingertips. We must duplicate that in the college and university.

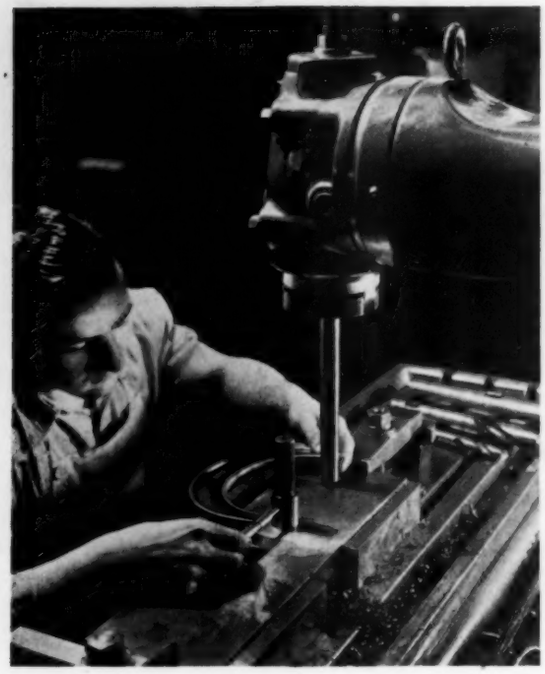
We must go still further. We must equip certain classrooms as teaching aids rooms. This is just a preliminary step, but a necessary one. These rooms which might well be double classroom size, should have equipment of all sorts available in them, playback equipment, filmstrip projectors, motion picture projectors, and the like. Many classes should be routed to this room and this space can be used economically.

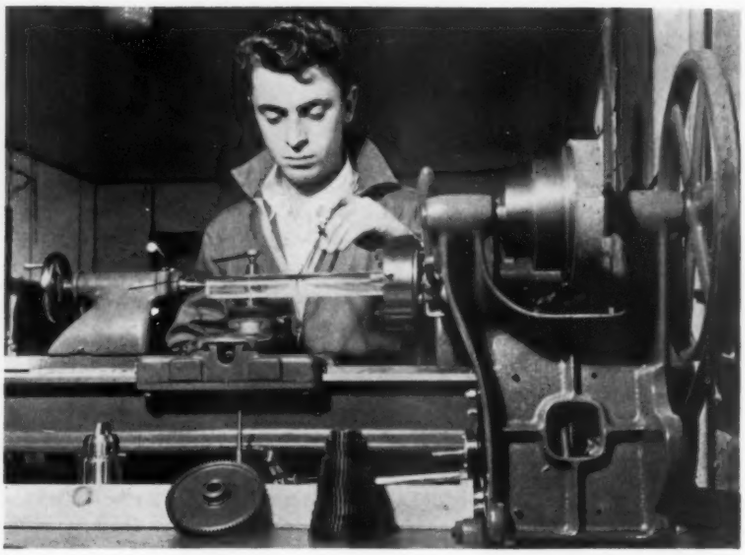
We will not have a satisfactory teacher-education program until we have produced materials specifically for teacher-education. We shall have to show how to use audio-visual materials by using specially prepared audio-visual material. To illustrate a demonstration we need a motion picture of that demonstration. To illustrate oral reading levels, we should have a series of recordings of such oral reading. We ought to have films which show how an alert teacher uses a multiplicity of teaching material on fractions, decimals, etc. We must, of course, take our prospective teachers on excursions, but these excursions are time-consuming. We must also photograph typical excursions, how they are prepared for and followed up.

The above type materials might be described as the "how to do it." They have the advantage of specificity and the disadvantage of the fact that there are many ways of teaching. A further need in teacher education is the production of a number of teaching situations or problems. Through a film or recording, we can sharply etch a particular problem in the teaching of reading, in guiding a high school student toward a vocational career, in meeting a special type of disciplinary problem, and the like. But the films or recording or film strip does not give the answer. It merely poses the problem. It poses the problem with the sharpness, concreteness, and dramatic quality of audio-visual materials. Discussion, reading, lecturing, demonstrations will follow as possible solutions for the problem are sought.

Is this new approach in teacher-education likely to come as a wave of the future? Don't depend upon it. If you are a superintendent of schools or a principal charged with the hiring of teachers, make certain that they know their teaching materials. If that means putting pressure on us in the teachers' colleges, please do that. Teachers, in turn, who are in school systems, need to put on pressure to see that they get adequate materials with which to work. No workman likes to work with dull or inadequate tools. To the reply that we cannot afford these materials, let us answer that we cannot afford ignorance either.

The past twenty-five years has been a period characterized by attempts to get adequate materials made and to try to purchase them. We haven't licked this problem yet, but we are on the road to doing it. The other problem, that of effective use of these materials, is still in its infancy. One of the most effective ways of assuring this improved use is through a revolutionary change in methods of teacher-education. Part of that revolution must come through increased use of these new-type teaching materials in the teachers' college itself.





Two pictures from a slidefilm series on Machine Shop Mechanics made by the Society for Visual Education for vocational training in industry, showing the use of micrometer (left) and caliper (right).

Filmstrips for War Training Classes*

Visual education, even under the extraordinary handicaps of the war emergency, still works.

JOSEPH A. ROENIGK,
Cleveland Trade School, Cleveland, Ohio

WOULD you like to "sit in" on a group of trainees for war production and see how visual aids function in the rapid training of skilled and semi-skilled workers? Here of course, we have to set up a simulated situation to show what teachers in this work have to cope with. It is very different from "orthodox" classroom procedure and at times is exasperating.

Last summer, I was doing what is called "on the line" training in a Cleveland factory where the new employees were largely "imi-grants" from the South. There were no facilities which could be called a classroom. I picked out a spot in the stockroom between rows of bins and shelves for storing parts, because it was naturally dark there when the lights were turned out. We used empty nail kegs and packing boxes for seats. I hauled in my car a portable screen, projectors and a blackboard (3 ft. by 4 ft.) which could be set up when needed.

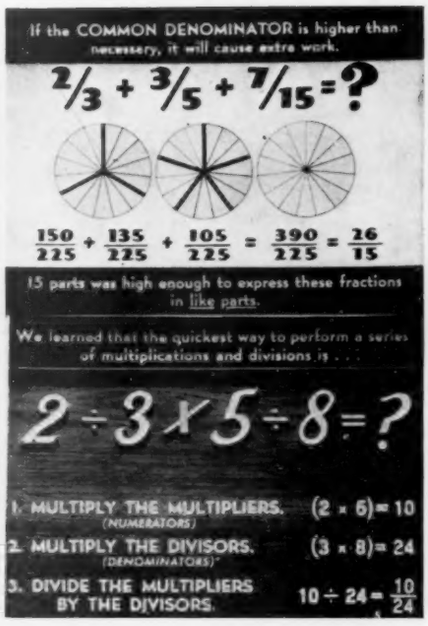
The class was made up of production operators who were relieved from their work stations for the brief period to attend class. I recall teaching a class in a plant where it was desirable (not to upset production schedules) to have the class meet at shift time, 3:00 to 3:30 P. M. The only available place to meet was in a corner of the cafeteria. Here the workers gathered for a snack or a pack of cigarettes and the customary greetings at the "change of shift." In a din of conversation and the rattle of dishes, my class would gather and they were usually supplied with pop and sandwiches. The class was always augmented by a number of curious listeners who were not always considerate of the teacher. You just can't be disturbed by such distractions although it is disconcerting—besides, sometimes a kind soul would buy the teacher a bottle of pop.

The experience of a co-worker doing this same kind of teaching illustrates the level at which some of this training must be conducted. He was to teach fractions of an inch, decimal equivalents and reading a micrometer, to a group of machine operators and line inspectors. For an average group this is not a big assignment but in this instance he just was not "putting it over." The word *equivalent* wasn't in their vocabulary and one woman said: "You can get as many quarters out of an apple as you want to." Illustrations such as four quarters in a dollar, etc., wouldn't work because to them, each 25-cent piece was a separate object—not a part of a larger unit. He used various devices and probably each contributed something in establishing the concept, but he finally succeeded by using a telephone directory. Each page represented a thousandth of an inch; altogether the pages made up the unit—one inch, a thousand pages. Half a book was 500 pages, a quarter book, 250 pages, etc. Thus were taught the decimal equivalents.

Not all war training classes are at this level nor the physical handicaps so extreme, nor are the members of any one class so unlike in backgrounds and abilities. If you like to work with a wide range of individual differences, try one of these classes. There are the foreman groups with high skills and abilities who are directing other workers. There are skilled mechanics who are being upgraded by learning other skills to broaden them. There are other groups composed of persons anxious to change from non-essential

* Talk given at the Visual Aids Conference, Cleveland.

Right: Frames from the Jam Handy slidefilm unit on Mathematics.
Below: From "Using a Follower Rest," one of the USOE films on the Engine Lathe, distributed by Castle Films.


If the COMMON DENOMINATOR is higher than necessary, it will cause extra work.
2/3 + 3/5 + 7/15 = ?
150/225 + 135/225 + 105/225 = 390/225 = 26/15
15 parts was high enough to express these fractions in like parts.
We learned that the quickest way to perform a series of multiplications and divisions is . . .
2 ÷ 3 × 5 ÷ 8 = ?
1. MULTIPLY THE MULTIPLIERS. (NUMERATORS) (2 × 6) = 10
2. MULTIPLY THE DIVISORS. (DENOMINATORS) (3 × 8) = 24
3. DIVIDE THE MULTIPLIERS BY THE DIVISORS. 10 ÷ 24 = 10/24

to war work—clerks, housewives, professionals—intelligent and schooled but to whom shop work is entirely strange. They are not only eager to learn but are quick to catch on—qualities which make teaching a pleasure.

The enormous amount of visual material now available for war production training has been a genuine help. There is also an abundance of printed material, such as diagrams, pictorial charts and instruction manuals, which is available for distribution to trainees. We look at this array of material and say "it's a godsend," but actually it has limitations. It is excellent in its utility if we know those limitations. The planning, production and use of visual aids are much like the same operations in the development of an automobile. It was carefully designed by engineers, tested in laboratories and on the proving ground, and then turned over to the public to drive. What the automobile manufacturer calls "bugs" did not show up when the car was tested by experts, but when handled by the average driver under conditions which were not simulated in the laboratory, deficiencies showed up.

With all this material, printed as well as that prepared for projection, there are two important requisites for its effective use—*timing* and *integration*. If we do not observe these guide posts, much of the efficiency and value of visual aids are lost. Timing is important in that the visual material must be used at the precise time in the learning process, when the trainee needs it. Too early, the material is "over his head;" too late is just too bad. After he has learned the manipulation of a tool or a machine or has performed an operation by whatever method was expedient, he has established habits which are difficult to change. There is little need for a visual aid after the learning process is completed and to correct an error in his technique requires other teaching methods.

Proper timing also includes the breaking down of a skill or operation into its elements and using a visual aid for only as many elements as can be retained and applied through practice. That is why teaching films and slides should be short—many of them are too long and cover too much territory at "one sitting." Sometimes well planned visual aids are used improperly and miss their mark entirely. I have seen teachers take trainees, regardless of their individual progress or stage of training, to the projection room and show them three or four subjects of moving pictures—sort of a double feature night, but without the "free dishes."

Integration is a close ally of timing and consists of using various teaching devices in close continuity, so that the learning of one phase, process or operation is completed before engaging in another. It means that the shop work or skill practice must be carried on at the time the visual aid is used; that the supplementary reading, testing and follow-up or remedial teaching must follow in close sequence. This is not always easy to do and many difficulties arise because of new enrollees, absence, various learning rates, and range of background. One is often tempted to give up to easier ways of teaching, but it is results in a time of crisis that we are after. Educators have been accused of teaching much subject matter superficially, but here is a situation where a little subject matter is taught intensively. Briefly, integration, as here used, implies bringing together the many elements in the learning process, properly timed and executed to accomplish the doing of an operation or skill as near perfectly as possible, as quickly as possible.

The vital part that visual aids play in this process is obvious and the relative value of each kind of aid may be argued, but whatever kind is used, integration and follow-up are indispensable. I prefer to use filmslides in presenting essential and detail instruction. However, I use all types, film strips with recordings, 16mm. sound film, charts and manuals—each has a worth in its place, if fitting and properly used. In

(*Concluded on page* 206)

Film Program of a Public Library*

The significant role that awaits public libraries in the field of adult and community education through visual materials.

R. RUSSELL MUNN,
Director, Adult Education, Cleveland Public Library

FOR twenty years the Cleveland Public Library has cooperated with the local theatres in an arrangement wherein we publicize good entertainment films along with related reading. Ever since there have been printed catalogs, we have helped informal groups to find where they could borrow 16mm. educational films.

It was less than two years ago that we actually began to assemble a library of 16mm. films for direct lending to the public. The Board of Trustees made an appropriation of $1000 for the purchase of films and, through the cooperation of the local OCD and the Council on Inter-American Relations, we became a depository for OWI and CIAA films. With this as a nucleus we have continued to expand, and we now handle films from the British, Canadian, French, Belgian, and many other governments, and have steadily filled in with our own purchases. Thus, in less than two years, we have built a collection of 400 documentary and other educational films, almost all 16mm. sound.

Our loans average 800 monthly. During 1943, our first full year of operation, we reported 7750 showings of our films to a total actual audience of 372,760 and a total per film attendance of 762,474. This may seem small to school people. However, when you consider that the borrowers are mostly adult groups and not formal classes, the figure does seem substantial. We lend to industrial plants, social agencies, schools and colleges, OCD groups, churches, clubs, PTAs, and recently have begun to develop quite a business with individual borrowers. We make no charge (except fines for late returns) to any borrower in the county. Except with the few films which we lend outside the county, all loans are on a 24 hour basis, and the films are picked up and returned by the borrower. We take no responsibility for projection.

A fundamental question which must occur to all educational film users is: Why should a Public Library be operating in this field? The answer, from the librarian's point of view, is simple. All progressive public libraries these days are convinced that their field of endeavor extends far beyond that of merely lending books to those with sufficient interest to come to the library to get them. A public library is an educational institution, with all that term implies, albeit the emphasis is on the dissemination and distribution of the materials of education. For years we have handled pictures, records, microfilm, and other non-book materials. For decades we have been trying to find new and more effective means of disseminating and recording information. The 16mm. educational film is an educational medium and it belongs in the library with other printed matter. Furthermore, it fits into all the technical processes of a library. You can catalog it, give it a Dewey decimal number, you can put it on a shelf, you can lend it on a borrower's card, you can even include it in a bibliography, or you can refrain from doing any or all of these things. As far as the technical processes are concerned, about the only difference is that, when it is returned by a borrower, you inspect it by turning a crank rather than by leafing over pages. The wide-awake public library cannot neglect the 16mm. film as one of the most effective of all the various kinds of educational printed matter.

From the standpoint of the use of films in adult education, and I mean all kinds of informal adult group activities, the library is in a peculiarly advantageous position to serve. We are non-political, non-profit. We have no ax to grind, we are interested in ideas, not in fees. Our mandate is to serve education in any form in which it may appear, with whatever materials may be appropriate. We took a leading part last fall in organizing an institute on visual aids for the Cleveland Church Federation. We have frequently spoken before, and arranged screenings for, such groups as the Motion Picture Council, the PTA, the Federation of Settlement Houses, OCD, etc. Finally, we have conducted a great many film programs of our own. Every Friday noon we have public screenings of recent films in the Main Library Auditorium, and these meetings are consistently well attended, not only by individuals interested in the latest films, but by representatives of groups who come to see them with the purpose of using them later in their programs. We have conducted film forums and various kinds of film meetings at the Main Library and in many branch libraries. We are collecting films of interest to children and these are now being used as a variant for the ever popular story-telling hour by the children's librarians. In all cases where films are used in our own programs, we try to relate them to books and to the learning process, and we have frequent occasion to suggest speakers or discussion leaders to borrowers who may wish to augment the educational value of their films.

There are a few public libraries in the country which render similar service, although Cleveland is the only large city library so engaged, as far as I know. For a public library, this kind of service is "a natural." In conclusion, I hope the Department of Visual Instruction will recognize, more fully than is apparent in this program, the enormous importance of 16mm. films in adult education.

Address at Visual Aids Conference, Cleveland.

The Film and International Understanding

DR. JOHN E. DUGAN, Editor
Haddon Heights, New Jersey, Schools

Interchange of Films Between Nations*

THOMAS HODGE
Film Officer
British Information Services

Tower Bridge London, (from *Know Your Ally, Britain*)

BEFORE the war, I taught school in England, and my main subject was Geography. In fact I majored in Geography in College; and yet the things I've seen in the U. S. since I first came to this country some eighteen months ago, make me think that for a long time I must have been getting my salary under false pretenses. I have realized how little I knew of America and her people, and also how much more real my teaching would have been, if I could have used some good factual films about America.

Before the war, we in England had very few teaching films on any subject, and many of those we had were useless from a teacher's point of view, because they covered a subject right from the Junior Grades to the Junior College stage. In fairness to our own teachers and schools, I must say that our woeful ignorance of America and her people is about matched by that of the Americans about Britain and the British people.

I believe that a free exchange between the countries of all kinds of visual aids and especially of motion pictures is one of the surest ways we can learn about other people. (I am taking it that no one disputes my contention that we should know more of other peoples and lands.)

I hope that the international conference of the educational departments of the United Nations, soon to meet in London, will make real progress toward setting up simple machinery for a free exchange of educational motion pictures. I know that one of the subcommittees will deal solely with this question.

Much progress towards an exchange of knowledge through motion pictures has been made in the last two years. We, and the United States, have a motion picture and film strip service in Chungking; We—and I think the United States, though I am not sure about this—make many of our films available in Russia. In England, the British Government distributes many Russian films like *Soviet School Child* and *Salute to the Soviet*. So that our people could understand more about the European peoples who found sanctuary in England when Hitler swept across Europe, and the lands from which they came, and also about others of the United Nations, we made and distributed films like *This Is Poland, The White Eagle* (Poland), *Before the Raid* (Norway), *Our Fighting Allies* (Czechoslovakia) and a whole series on the British Commonwealth.

When America entered the war and began to make factual films, it was quite natural that we should want to show our people about the great war effort of the United States. So every OWI film which goes to England is shown to the British people by the British Government, either through its arrangements with the cinematograph trade (which by the way guarantees showing in every cinema in England), or by one of its 250 travelling cinemas which go to schools, factories, civil defense meetings, garden clubs, and so on. In fact they go to any organization which can raise an audience. Films like *Henry Browne-Farmer, Home on the Range, Bomber, Tanks,* and others, have been shown to more than 5,000 audiences in England.

We have also two films from the very excellent "Why We Fight" series. Frank Capra made these films to show the United States service men something about their allies and about the issues of the war. You will find *Battle of Britain* and *Know Your Ally Britain* two first-class films worthy of inclusion in any program.

Some of you may dub this exchange of films between the nations as propaganda. Who isn't propaganda conscious these days? If you feel uneasy about these films, all I ask you to do is to look at almost any of the films put out by Canadians, New Zealanders, Dutch, Norwegians, Poles, Czechs, Russians, and by the time you reach the end of your program you'll have learned a lot, but even in your most completely

*Talk given at the luncheon meeting of the Northern Ohio Visual Aids Conference, April 4, and broadcast over WJW, Cleveland.

A pottery class, with instructor, nurse and patients.
(from *Psychiatry in Action*)

relaxed state, you'll be just as good an American as you were in the beginning.

I know, when I talk of British films, many will say, "Sure, the British films are good, but "the accent!" And you will probably say "the accent" in such a way as though you thought a British accent was some loathsome way of talking which the British had acquired after years of hard practice. My mother doesn't go to the movies very often. Probably once in five years. And when she does go, she says she "can't understand a word those Americans say." We see and hear so many American films that our ears have now become used to what once we thought of as your strange way of talking, and we understand them readily. I would like the Americans to hear so many British films that their ears too become accustomed to the "British accent," and, of course, when that happens I would imagine that there will cease to be a "British accent" so far as the Americans are concerned.

Here in America, films about Britain are shown in the motion picture theatres by arrangement with the motion picture industry. You recall famous films like *London Can Take It*, *Target For Tonight* and *Desert Victory*, which last by the way was shown in 11,000 cinemas out of a total of 16,000 cinemas in the United States. The OWI distributes others like *Message From Malta* and *Listen To Britain*. In addition to these two outlets we ourselves maintain our own distribution service of 16mm. sound films. At offices of the British Information Services and also at British Consulates we have set up film depositories where you can find films on farming and gardening, on the United Nations and on the British Commonwealth; science films for high school and junior college; films about our great industries, and films—like the now famous *Desert Victory*—on our armed services.

Probably one of the most important of our new films is *Psychiatry in Action*, which has been adopted by the American Psychiatric Association. It shows the psychiatric treatment of neuroses in servicemen and civilians, and so is of tremendous interest not only to hospitals, doctors and nurses and psychiatric workers, but also to the many adult organizations now studying the problems of the rehabilitation of the service men or women.

A great beginning has been made during this war towards securing a greater and freer exchange of knowledge and information about our countries through the medium of motion pictures. Let us all work for some way to continue and to extend this exchange. As I see it, each country's contribution towards the building of the Peace can only be in proportion to its people's understanding of the problems and peoples involved, and I believe that motion pictures, together with all other available media, can best bring about this understanding.

Filmstrips for War Training Classes

(*Concluded from page 203*)

teaching groups of wide ranges in learning ability and background (I have asked many of them which they like best), the motion picture is too fast in action. Narration is likewise too fast for some, and in both mediums, the commentary has words and terminology not always familiar to the group. When using filmstrips, the explanations can be tailored to fit the group. I prefer to use movies at the beginning of a lesson to stimulate interest or at the end to summarize.

In the selection of filmstrips for the mainstay, I like them without captions for use with such groups. Some descriptions are too advanced for these learners, and may also distract their attention from what the teacher is saying in connection with the slide. The photographs and diagrams need to be very simple, reduced to basic elements as far as possible. As a rule, visual material cannot be too simple—more often than not, it is too complicated.

When and if third-dimension views are ready for teaching purposes, they will be a big help. Two dimensional material lacks reality to many who are not versed in mechanical drawing. Cross-sections are often misleading. I had a woman trainee ask me why the pistons in the diagram were square shaped and the ones I showed her in the engine were round. With three-dimension pictures, blueprint reading and mechanical drawing will be easier to teach.

When using visual aids in any combination and singly, I have much faith in the tests or check sheets as a follow-up. The test or check sheet is not an examination—it is a teaching device. I find it particularly useful with adult groups. It is a stimulus for further investigation into the subject and usually results in heated discussions giving the teacher a splendid opening for re-teaching. Nothing is so flat as a lesson where there are no questions or discussion by the group. This device forces out questions and a high score is something to compete for. I let them grade their own papers, or exchange them with the comment: "Trade with someone you think won't cheat you." The higher the intelligence and broader the background of the class, the more effective is this device.

MOTION PICTURES—NOT FOR THEATRES

Installment 57 continues the story of the first important educational talkie program which began under the wing of the Bell Telephone System

By ARTHUR EDWIN KROWS

Chapter XIII—Conversation Pieces

IN THE MEANTIME plans were proceeding apace for the making of an Erpi educational series. Several outside educators remain individually and independently convinced that the intention of making a teacher-training series was their suggestion during visits of inquiry to Col. Devereux and that they have been deprived of credit for it. However, I feel that the nature of the Erpi educational committee, with its strong ties at Teachers College, Columbia University, is sufficient to explain a spontaneous origin. At all events, the first emphasis *was* on teacher-training.

Teachers Come First

APPARENTLY it was felt that those who were trying to promote the new ideas in education would most cordially welcome this obviously useful medium of the talking picture and develop it most actively. Also, that pictures showing these educators and what they were doing would be most eagerly sought wherever teachers congregated for self-improvement and in the Parent-Teacher Association meetings. The chief succeeding objective, pictures in the classrooms, would follow naturally when the teachers had learned the effectiveness of the talking screen for themselves.

Everything was with allowance for the time factor. Erpi could afford to wait. It was an everyday saying around the place then, that, "The Bell System has been in existence for fifty years; it is building now for the next fifty." That was it. The Bell System was a tremendous organization commanding the communications industry. Talking pictures from its point of view were a mere incidental consideration. They did not constitute a drop in the bucket compared with the telephone. There was plenty of money to spend, and the officers could easily and comfortably wait to learn from possible, probable mistakes. No group like this had ever been seen before in either theatricals or non-theatricals.

Working under the probationary arrangement with Paramount had its advantages. The Paramount News Building, in West 43rd Street, over near Tenth Avenue, was more inconvenient to reach than the Fox Studio, but, once there, we were among practical motion picture men who were not too abashed by the profundities of the sound engineers. They had a processing laboratory in the premises, and their tiny stage was remarkable for its compactness. Fred Waller, manager of the industrial division and in charge of the trick photography for the organization (the same who at one time not so long before had served in the Film Guild) was not only a tireless worker, but he was familiar with all of the short cuts, including many which he had devised himself to take advantage of the possibilities of sound. His assistant, Leslie Rousch, son of a veteran film laboratory man, had been trained along the same lines.

Waller made an excellent impression on the Erpi educational committee in the first work he did for them. Even before Stokes had returned from Europe to begin work with Erpi, they had decided that nothing could be more convincing to teachers in training than to see for themselves the actual methods used in the modern experimental schoolroom. Accordingly, when Stokes had returned from the Berlin advertising convention and

"One-way vision dome" at the Yale psycho-clinic. The wire mesh of the dome, brightly lighted within and dark outside, appears solid to the unsuspecting baby in the crib.

Arnspiger had been engaged, Waller and his camera crews had been sent to an experimental school in Bronxville to photograph actual situations without rehearsal. If the scenes were not spontaneous, the committee said, they would be valueless. Not knowing how the action might develop, all Waller could do was to light the room in its entirety, set up a number of cameras to cover every angle of visibility, and shoot. What might become usable thereafter was just a matter of luck.

Waller, who had been accustomed to the most rigid budget economies in production, stood by helplessly in this fantastic situation, while, to his everlasting disgust, the cameras ground out in one afternoon upwards of 16,000 feet. Out of this material two tentative two-reel subjects, entitled respectively "A Case of Professional Study, Grade I," and "A Case of Professional Study, Grade VI," were assembled but quietly shelved. More than two years afterward a rehash of the material was made for its silent values, and provided with a lecture spoken by one of the teachers at the school. The original sound was virtually unusable, as Waller very well knew it would be in such uncontrollable circumstances. With microphone suspended on high out of screen range of the cameras, hard floors, walls and ceilings to echo and reëcho the noise, many of the children seated on kindergarten chairs, low down, and the unpredictable sounds including hammering and sawing as well as differently pitched voices, nothing else could have been expected.

This footage was screened repeatedly in its unassembled form as Arnspiger and the committee considered what might be done with it. But other projects had arisen to occupy them, and putting the Bronxville reels aside for then, the committee turned to the new ones. One of these was a two-reeler entitled "Child Growth," produced after short notice at the Paramount News studio to demonstrate some European researches in teaching psychology of the pre-school child. The lecturer and demonstrator was Dr. Charlotte Buehler, professor of psychology at the University of Vienna, who chanced then to be visiting New York in connection with the American publication of one of her books. Excluding the unhappily made test films I have just mentioned, it probably was the first teacher-training talkie ever made.

Of course, it was my job to make my own productions as technically perfect as might be; but, whenever I deplored results which had fallen short of their intended effect—and in the circumstances of the time there were plenty of those—Howard Stokes pointed out that the most important consideration just then was to turn out our subjects as rapidly as possible. One or two "perfect" productions, as he said quite rightly, could be of very little use to the clamoring salesmen, whereas they could dispose of complete sets of even average production quality. Accuracy of the basic content was of more concern to them, and, naturally, that phase was the responsibility of the committee.

Accordingly, I rushed through my production schedule as quickly as I dared. There was one awful week in which I personally made six different subjects, most of them single-reelers, however. That this may not seem too incredible, I should explain that probably four out of the six consisted of straight lectures by educators who usually started seated at a library table, and then, as argument warmed up, arose and sat on the table, a

For Varney Clyde Arnspiger opportunity never had to knock more than once—and occasionally not at all. His enterprise has helped the field.

little further variety being provided by shifting camera positions from side to side and using two- three- and four-inch lenses for varying distances.

One of these subjects was the presentation of Mrs. Ina Craig Sartorius, in a series of Binet-Simon tests of children ranging in age from about three to thirteen. Another was of Hughes Mearns, professor of creative education at New York University, an especially delightful gentleman who matched pennies with the cameramen between takes and told me horrendous tales of modern youth. Dr. Mearns brought his wife a few days later to see the "rushes" and, when the screening was at an end, I asked Mrs. Mearns how she liked her husband's performance. She drew a deep breath and answered, "Well, it's Hughes all right; but he looks shinier than I've ever seen him before." My hectic life, you see, was not without its lighter moments.

One of the most notable of the subjects in the early teacher-training category came about in an odd way which I think may be of some importance to the record. An elderly gentleman came to my office one morning and stated that he wished to talk with me about studio scenery. In New Haven, where he lived, he had inquired for information on this subject, and had been referred by Roy Phelps, local non-theatrical producer, to me. It developed that he was Dr. Arnold W. Gesell, celebrated authority on infant behavior, founder and head of the Yale Psycho-Clinic. In his work he used 16mm motion pictures, made by himself, of the babies being studied, through what he called a "one-way vision screen." By means of this device the camera could see the babies but the babies could not see the camera. Now he wished to expand his studies to cover behavior of the toddling child, and he desired to build at the clinic for this purpose a setting which would seem like a real room to the child, but which would nevertheless permit the use of the cameras from any angle.

As an Erpi gesture of good will toward the Yale University group, I was permitted to visit Dr. Gesell at New Haven and do what I could to assist him. As an especial return courtesy I was shown in fascinating detail the remarkable establishment which he had built and headed, and discussed at length with him his plans for the proposed new studio arrangement. When the conference ended, Dr. Gesell wished to know what he might do in fuller return. He knew, he said, that as a man in business, I necessarily must have something of the sort in mind and what was it? I protested our actual friendly intention, but, having been greatly impressed with the pictorial possibilities of the interesting work which he was carrying on, I suggested the production of a talkie to show it.

Dr. Gesell listened with grave courtesy and gently shook his head. What could be the purpose of such a picture? To advertise his work? He needed nothing of that sort, and, the clinic being sufficiently endowed, no publicity was required there. Moreover, he had once demonstrated in a few scenes for the Pathe Review. His argument seemed conclusive, but I jumped at a straw. The clinic surely had been founded, I reminded him, with the idea of spreading good. Advertising or no advertising, a film made of his work under proper, dignified auspices, would accomplish that purpose, and to deny this suggestion would be to neglect an unusual opportunity. In fact, could he conscientiously ignore what amounted to a duty to the founders? Upon this point he yielded. He then wrote the scenario himself, and I produced the picture with Roy Phelps as cameraman and with Dr. Gesell speaking the running narrative. It became one of the most successful items in the teacher-training series, and it led to making public an entire set of Dr. Gesell's experimental records.

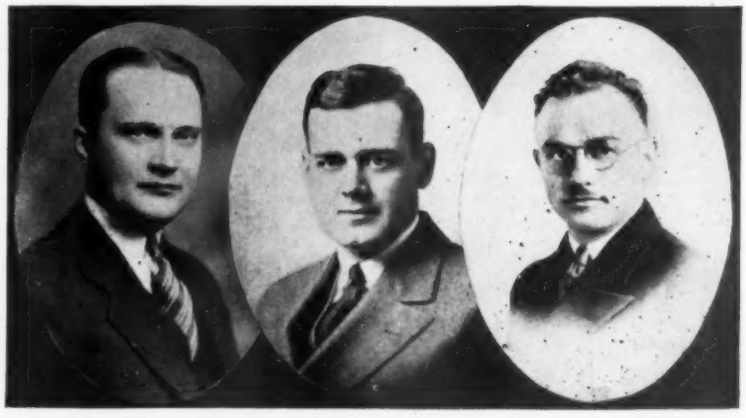
One of his assistants at the Psycho-Clinic then was Dr. Alice V. Keliher, who later became well known to the visual instruction field. She it was who prepared certain teacher's handbooks for use with the lantern-slide courses of Keystone View, of Meadville, Pennsylvania. Another of Dr. Gesell's assistants, in charge of his special film laboratory, was Jules Bucher, who was to gain reputation as a cameraman-director with Julien Bryan. Working for Bryan in subsequent years, he travelled widely through Russia and Latin America, producing some admirable, useful pictures.

Staff in Hand

At about the time that Stokes had decided to take on an assistant, Arnspiger also had felt the need of one. Accordingly he summoned from Oklahoma his friend James A. Brill, former director of high school music at Oklahoma City. Brill proved to be a frank, likeable soul of the Will Rogers order, with a genuine, specialized interest in the profession he had left, a love of trout-fishing, and, what probably was of high importance, too, an excellent sense of humor. It doubtless saved him from taking many subsequent situations too seriously. He had had some experience with amateur dramatics and quickly developed a creditable knack of composing pedagogical scenarios.

Brill was Arnspiger's first assistant after Stover, but he was not long the only one. Now that we had an impressive list of teacher-training subjects, shown triumphantly at various teacher conventions, and the committee was planning pictures to be produced in various lines of study, there naturally was plenty of research to be done in the line of curricular needs and subject matter of individual units, and in the preparation of teaching handbooks to accompany the films. This justified staff expansion, and, of course, there was at that time plenty of money to make staff expansion possible.

One of the most discussed subjects for possible utilization was the study of languages, so, after Brill, who had been responsible for the well-planned set of reels on music appreciation, there was engaged as a new research assistant, Max R. Brunstetter. He was former principal of the high school at Millville, New



Among Erpi's "research associates" Melvin Brodshaug majored in natural science; Edgar Stover in educational experimentation; and Howard Gray in social science and teacher training. Stover was first to be engaged. Portraits from left to right.

Left to right: Max R. Brunstetter, research associate in vocational guidance; Laura Krieger Eads, tests and measurements and elementary social sciences; and James A. Brill, the fine arts.

Jersey, where he had done interesting work in developing techniques for teaching French and Spanish. A graduate of Dickinson College at Carlisle, Pennsylvania, in 1922, he had received his M.A. from the University of Pennsylvania in 1928, and was to gain his Ph. D. from Teachers College, Columbia University, in 1930. Came next, in quick succession, Howard Gray, specialist in social science and teacher-training; Melvin Brodshaug, expert in natural science teaching; and Laura B. M. Krieger—later Mrs. Eads—to make tests and measurements in the elementary social sciences. Edgar Stover's work was ticketed as the field of experimentation, and he was set to work with Miss Krieger to devise and to conduct tests. Howard Gray was a native of Colorado and, in 1926, a graduate of the University of Montana. His M.A. and his doctorate both were gained at Columbia, from Teachers College, the latter just a few months before his coming to Erpi.

These educators were uniformly a sincere, able, hard-working body. They had won schoolmen's accolades. Miss Krieger, Howard Gray and Melvin Brodshaug were Ph. D.'s, each with a right to be addressed as "Doctor." Brunstetter had most of his counts and became a Ph. D. in the first year of his presence at Erpi. Brill and Stover had mere A.B.'s, but both were thinking seriously of trying for the hood. Devereux was a Ph.D., and even Stokes was an A.B., well on his way to a master's degree from Colgate, and listed in *Who's Who*, beside. Arnspiger, at the close of 1931, was still only a bachelor of arts, but he went to Columbia University during odd times during his busy days, and, after meeting the inflexible requisite of hours of study, became a doctor, too. His thesis, *Measuring the Effectiveness of Sound Pictures as Teaching Aids*, using the materials provided by his current employment at Erpi, was issued in book form by the Bureau of Publications of Teachers College in 1933.

All of this learned activity naturally provided additional grist for the production department mill, and, of course, it never would do in the circumstances to have defections there. So Stokes was obliged to enlarge his own staff also. With his permission and approval I took on Don W. Bartlett, who had been working fitfully as a free lance film editor since his return from his Canadian experience with Bruce Bairnsfather; Richard F. Chapman, who had fallen on lean times with the receivership of Fox Films and the collapse of sponsored pictures at Paramount; and Charles Brooke, who had been my assistant in production since my association with Carlyle Ellis. Consequently, the production department became rather imposing, too.

Arnspiger was especialy disturbed that in making the original educational talking pictures at Erpi the production authority was not completely in his own hands. But then, the production department was not without its own ideas on education. This is interesting to remark because it represents the recurring situation in every educational film enterprise that ever existed. The educational head of an educational program is generally obliged by his own ignorance of film procedures to divide his authority with a motion picture man. Stokes had known non-theatricals for a long time. He had been aware that this natural difficulty must arise and had anticipated it by insisting from the first that one of Arnspiger's research assistants should be present in every production period to decide pedagogical questions which might come up. Stokes, with malice towards none and sufficient charity for all, believed then, as always, in the supreme merit of minding his own business and leaving all else to the divine course of nature. He was quite right. In proper time nature was to give Arnspiger a production facility of his own and to return Howard Stokes to his first love, his office at the A.T.&T.

To be sure, a compromise spirit was needed on both sides. We, of the production division, with some practical experience in writing and staging films for industrial and social service purposes, had naturally reached certain conclusions about the effectiveness of techniques in conveying useful ideas via the screen. When a subject was of itself rather commonplace, and could not be given a fresh approach in imparting arresting information, we deemed it worthwhile to build up the interest by devising an attractive form of presentation. But we were to discover that our educators wished to avoid such additions as injections of elements disturbing to the lesson. We were to learn that, while modern education seeks to integrate new knowledge in the pupil's experience, it was frowned upon to integrate the pupil's experience in the new knowledge, as we would do in following approved methods of the theatre. Above all, we discovered that educators, as a class, shunned aroused emotion in the learning process whether it improved attention or not.

Production Research

An instance, to show the dilemma which arose in this respect, was in the group of four subjects known as "The Music Appreciation Series," planned and executed with the supervision of James Brill. We began the series with a reel on the woodwind choir, a lecturer standing with the musicians and frankly explaining the instruments individually and in combination. This was the very early period, when the lecture technique for a teaching film was virtually the only one generally approved. Brill's interesting text for the lecture referred to the piccolo as the comedian of the choir, and, when I came to the closeup of the piccolo, I animated the instrument so that as it squealed it apparently wriggled of itself on the music rack to the comic consternation of the lecturer and musicians. This touch was well received, and we were encouraged to explore possibilities further.

At about the same time I had varied the straight lecture technique of Joe Coffman and others by having interpolated scenes, consisting of stock film and sometimes material especially staged, with the lecture continued over them. Of course, this had already become familiar practice in the industrials, but when I thus "illustrated" the long talk of Hughes Mearns on "Creative Education," using an acted episode, it was an almost sensationally new technique for this purpose, and the subject was authorized to be made only after many qualms and misgivings. But, each time I essayed a new way of doing and found it effective, I naturally was anxious to explore further and to make these experimental pictures experimental from the production side as well. Those early films may seem rather quaint now; but, in the light of their undeveloped times, some of them were distinctly progressive.

Brill, whose experience with amateur dramatics made him considerably less word minded than some other teaching authorities we knew, always shared this attitude with enthusiasm, and assisted us greatly in breaking down the natural conservatism of the committee. But we had one serious setback which for a time put a stop to any developments of this nature. It was when we came to the second subject in Brill's music series.

(To Be Continued)

Summer Courses in Visual and Audio-Visual Education, 1944

The following list supplements that which appeared in April. Figures in parenthesis show semester or quarter credits.

California

Humboldt State College, Arcata — June 26-July 27
Workshop in Audio-Visual Aids — Mrs. Alma Thompson

Illinois

Wheaton College, Wheaton — July 24-Aug. 18
Visual Aids (2) — Robert L. Cooke

Iowa

Iowa State College, Ames — June 12-July 19
Visual Methods in Education (3) — A. P. Twogood-H. L. Kooser

Kansas

University of Wichita, Wichita — June 5-16
Workshop in Elementary Education will emphasize Visual Education — W. A. Bonwell

Kentucky

University of Kentucky, Lexington — July 20-Aug. 26
Visual Teaching (4 qr.) — Louis Clifton

Louisiana

Louisiana State University, Baton Rouge — June 9-July 22
Audio-Visual Aids (4 qr.) — Mary Clint Irion

Maine

University of Maine, Orono — July 5-Aug. 11
Motion Pictures in Education (2) — Paul S. Miller

Massachusetts

State Teachers College, Hyannis — July 6-Aug. 15
Audio-Visual Aids to Teaching (2) — Earle S. Collins

Michigan

Central Michigan College of Education, Mount Pleasant
Visual Education (2) — July 3-Aug. 11 — W. C. Smith
University of Michigan, Ann Arbor — July 3-Aug. 14
Visual Sensory Aids in Education (2) — F. Dean McClusky

Missouri

Central Missouri State Teachers College, Warrensburg — July 3-Aug. 25
Audio-Visual Education (2) — Byron Westfall

New York

Chautauqua Summer Schools, Chautauqua — July 10-Aug. 18
Laboratory Course in Visual Aids I and II (2 qr. ea.) — Mary Molyneaux
Syracuse University, Syracuse — July 3-Aug. 12
Visual Education (3) — To be appointed

Oklahoma

The University of Oklahoma, Norman — July 17-29
Visual Aids Workshop (2)
W. B. Ragan—Betty Blanton—Weldon Brown

Pennsylvania

Muhlenberg College, Allentown — July 5-Aug. 30
Visual Instruction (2 or 3) — John E. Trainer

Texas

Southwest Texas Teachers College, San Marcos — July 17-Aug. 25
Audio-Visual Education (3) — Ruby Henderson

Virginia

State Teachers College, Farmville — July 24-Aug. 26
Audio-Visual Education (3 qr.) — E. M. Johnson
University of Virginia, Charlottesville — July 3-22
Workshop in Visual and Auditory Aids (2) — John A. Rorer

Washington

Central Washington College of Education, Ellensburg
Audio-Visual Education (2½ qr. for 1-month course, or 5 qr. for 2-month course) — Edward B. Rogel
Western Washington College of Education, Bellingham — July 20-Aug. 18
Visual Aids (3 qr.) — Fred W. Knapman
Construction and Use of Visual Aids (3 qr.) — Charles M. Rice

Wisconsin

University of Wisconsin, Madison — June 24-Aug. 18
Visual Education (3) — W. A. Wittich

Workshop in Visual Education For the Religious Field

THE first North American Workshop in Visual Education for *church workers* will be held at Garrett Biblical Institute, August 28 to September 2, Evanston, Illinois.

There is a rising tide of interest in the use of visual method by churches. Despite the shortage of equipment, there is an increasing use of the film material that is now available. After the war when equipment is released there will doubtless be an upsurge in the use of visual materials and method. Wise guidance is essential if the interest and resources of local churches are to be used most effectively both now and after the war.

There is great need for persons equipped to teach courses in visual education in the 700 schools for church workers scattered over the country. Leaders are needed to organize and hold conferences and institutes, to serve as chairmen of committees of visual education in local churches, in state and city councils and in denominational staffs. The Workshop to be held this summer is encouraging the discovery of such potential leadership on the part of denominations, state and city councils and local churches. One outcome of the Workshop should be the beginnings of a field leadership in visual education.

This conference is being conducted under the auspices of the International Council of Religious Education which is the official organization through which 40 denominations and about 110 state and city councils work together in Christian education. Its constituency includes about 80 per cent of Protestantism and it corresponds in the church school field to the American Council on Education in the public school field. The administrative committee for the Workshop includes such persons as Rev. William Rogers and Dr. Paul H. Vieth. The persons invited to attend the Workshop are: national staff members, committees responsible for visual education, age group workers, area and council executives, supervisors of church schools, pastors, directors and professors of religious education.

Throughout the conference attention will be given to all kinds of visual aids including motion pictures and slides but, also, including the use of prints, murals, school journeys, maps, worship centers and other non-projected visual aids. The program will include a Seminar on the whole field of visual education in the church, "functional work groups" for special groupings of leaders; production groups in script writing, in simple motion pictures and slides and in non-projected visual aids. Guidance will be given in operating projectors. Demonstrations of methods and review of films will be provided. The very best leadership of the country is being secured for each item in the program.

This first North American Workshop should be a foundation stone for an increasingly adequate total program of visual education for the churches. Facilities are limited so that advance reservation is necessary. Inquiries should be addressed to Dr. Mary Leigh Palmer, 203 North Wabash Avenue, Chicago 1, Illinois.

MARY LEIGH PALMER

SCHOOL MADE MOTION PICTURES

HARDY R. FINCH, Editor
Head of the English Department
Greenwich High School, Greenwich, Conn.

With a question box on the making of school film productions, conducted by
DAVID SCHNEIDER
Evander Childs High School, New York City

Your editor is pleased to present in this column a comprehensive account of the University of Minnesota Film-making, secured through the cooperation of Paul Wendt, visual education director who has supervised the production of several unusual films during the past year.

University of Minnesota Productions

ALMOST a year ago the three reel 16mm. color sound film on the curricula of the School of Nursing called *Nurse Student in Wartime* was released for distribution. This film was designed to inform prospective candidates for the School of Nursing on the content of both the three-year and five-year curricula leading to degrees.

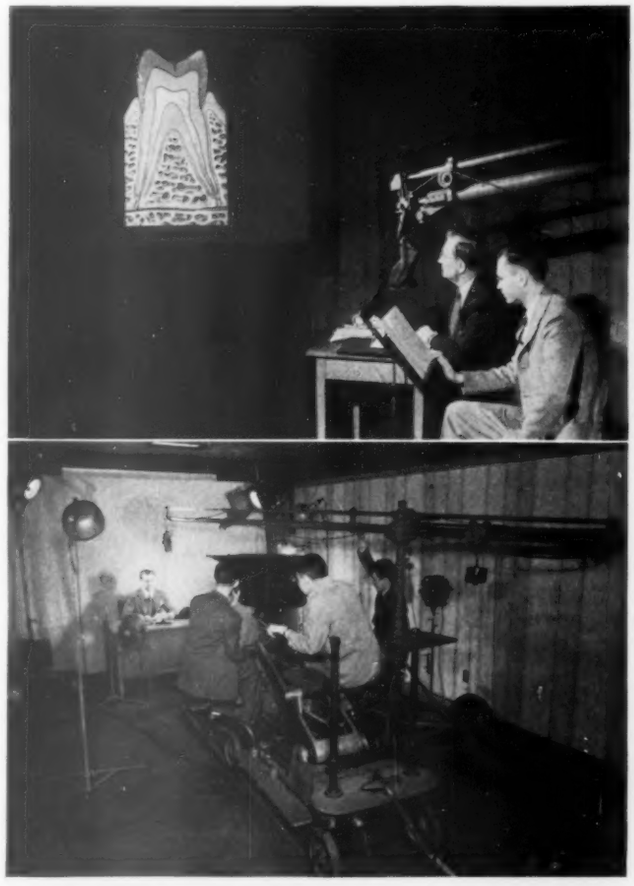
The first few scenes of the film show a freshman having conferences with Miss Densford, the director of the School of Nursing and outlining her plan of study. Then follow in rapid sequence scenes from many classrooms, laboratories, and study halls where the same student is shown hard at work. Types of recreation that nurse students are encouraged to enjoy are also shown. Distinction between the two curricula is clearly made by means of a large wall-size course diagram located in the School of Nursing office.

When the student has completed her preliminary studies, she enters into fields of specialization such as X-Ray Therapy, work with psychiatric patients, community nursing, etc. The variety of specializations shown here in juxtaposition presents the new student with a graphic over-view of the opportunities open to her. The last part of the film shows some of the other opportunities open to nurses such as employment with airlines, industrial nursing, and other fields. The film closes with a short sequence on the importance of nursing to the war effort. Several scenes in this sequence are devoted to the new Nurse Cadet Program and its colorful uniform.

Before the war the School of Nursing regularly provided speakers to visit high schools and other organizations whose members might be interested in entering the School of Nursing. Within a short time after the opening of war, it was evident that the School of Nursing could not provide staff members for these duties, and the color sound motion picture was made to do most of this recruitment work. Since the film was released, it has been booked solidly without interruption.

The production was under the direction of John L. Hamilton, assistant director of the Visual Education Service, and under the technical supervision of Mrs. Christy Hawkins of the School of Nursing. The method of production followed the usual procedure of film production at the University. Mr. Wendt, Mr. Hamilton, and Mrs. Hawkins first prepared a subject matter outline of the content that the proposed film should contain paralleling the two courses of study. Then Mr. Wendt and Mr. Hamilton visited representative nursing classes and laboratories in order to determine more exactly the camera angles with the aid of portable view finders and to plan in advance the blocking in of the lighting of each scene. These specific camera directions were then incorporated into a shooting script. In the meantime, a search was made among the students in the School for four girls who would play the leading parts in the film. Many candidates were interviewed, and those selected from this large group were screen tested in color, both in medium shots and close ups. In the meantime, Mr. Hamilton and Mrs. Hawkins had written a commentary to accompany the film and when this was accurately timed, shooting began.

The shooting schedule actually took two months of intermittent photography followed by one month of editing, recording, and synchronizing and release printing. Since most of the nurses' activities are indoors, the production called for an unusual number of interior scenes. Since the film was in color, the interiors



Top: Recording commentary on film on toothbrushing. Bottom: University production crew in action.

called for the use of all the 5,000 watt and 2,000 watt Fresnel lighting units in the Visual Education Service studios. Finding the power necessary to run between twenty and thirty thousand watts of lighting constituted a great problem in most buildings which were never planned for a current consumption of 300 amperes. However, one factor tending to make lighting easier was the fact that slightly under-exposed color originals tend to make the most faithful color duplicates.

Another production completed during the last year was a two reel 16mm. color sound film on the technique of toothbrushing called *Your Own Teeth*. This was sponsored by a local toothbrush manufacturer and was made under the direction of Dr. Raymond Johnson of the School of Dentistry of the University of Minnesota. The film is done entirely in animation designed and executed by Karel Dodal, a Czechoslovakian artist working for the Visual Education Service. Mr. Dodal had years of experience in production of animated motion pictures in Czechoslovakia before coming to this country.

The purpose of the film is to show, carefully and in detail, the correct way of brushing the teeth and the gums. After a brief introduction on the cause of dental decay, the film takes up one by one the different techniques that should be employed in brushing different parts of the mouth. Particular attention was paid to the correct angle of the brush and type of brush stroke to be used in brushing between the teeth. The film ends with a short sequence of animated charts showing the proportionate numbers of people who lose their own teeth in successive decades of the life span, and the small percentage of people living to old age who retain their own teeth.

The production of an all-animation film in color and sound was an ambitious undertaking for a university. Mr. Dodal and six artists took several months to complete the thousands of individual colored drawings, called "cells", which when photographed occupy only ten minutes on the screen. There was liberal use of delicate air brush techniques. The technical problem of perspective was especially difficult in many scenes inside the mouth. Most of the scenes in *Your Own Teeth* would have been impossible to photograph in real life. By using animation, not only was it possible to present the teeth in angles which were best for photography, but also by means of such devices as showing some teeth temporarily transparent, it was possible to explain inter-dental brushing with great clarity.

The production staff is at present in the midst of shooting a four reel 16mm. color sound film for the University on the training of the Armed Units on both campuses. This involves the Electrician's Mates, Machinist's Mates and the V-12 Program for the Navy. For the Army, it involves the Pre-Flight Corps, the Pre-Meteorology Unit, and the ASTP Units in German, Swedish, Finnish, and Japanese, and advance engineering. In addition are ESMWT Units, a group of Curtiss-Wright Cadets, some women being trained for the Signal Corps, and the large Nurse Cadet Program. The film will show the classroom instruction, the barracks life, the messing, and recreational activities of all these units. The film is being produced primarily as a historical record, but it is anticipated that it may also be circulated throughout the state as a report to the citizens of part of the war effort of the University.

The last year has also seen more shooting for the general film on University activities which has been in production for several years. This is a kind of newsreel record of outstanding events to which additions are being made continually.

Another production activity which goes on intermittently is the photographing of films which might be called research records. Whenever a doctor in the Medical School has an unusually interesting case whose symptoms involve motion, the Visual Education Service dispatches a movie photographer to make a record of the patient. Similarly, other research at the University often involves a motion picture record. The teaching staff at the University has become accustomed to using motion pictures in research, and plan their use for this purpose as naturally as the use of other laboratory facilities.

QUESTION BOX ON SCHOOL FILM PRODUCTION

Question: I am planning to invest in a screen for home projection of my 16 mm. films. Are there any factors I should take into consideration in order to make an intelligent purchase?

Answer: The kind and size of screen you should get depend upon the optical system of your projector, and upon the length of your room—the distance between projector and screen.

Projection screens are usually of three kinds. Those made of white cloth are known as the diffuse or matte. The emergency, home put-up screens of table cloth or window shades are not as good for the simple reason that the home products do not reflect sufficient light to really bring out all the brilliant images. The next time you watch a film projected on a home improvised screen stand in back of that cloth. You can see the not-so-bright pictures almost as well from the back as from the front views. A good matte screen has a sufficient opaque projection surface to prevent light from leaking through. The disadvantages of the matte screens are that they eventually become yellowed with age, thereby reducing contrasts in the picture and upsetting any color balance whenever Kodachrome films are projected. This type of screen requires a high unit of illumination, about 16 foot-candles. This means a projection lamp of higher wattage.

The second type of screen is known as the beaded kind. This screen consists of a base of white cloth upon which minute glass beads have been attached. This surface can be kept clean by carefully removing any dust or dirt with a damp cloth. Since glass beads reflect more light than plain white cloth it stands to reason that the unit of illumination will be less—approximately 8 foot-candles.

The smooth aluminum-coated, as well as the silver surfaced screens constitute the third group. With these screens and good lamps under-exposed pictures may show up to advantage. Of course normal pictures can be projected with a minimum of light. The unit of illumination is about 4 foot-candles.

Since beaded as well as smooth surfaced screens reflect light more strongly in the direction of the projector, it is advisable to seat the audience within an angle of about 15 degrees on either side of the projector. Therefore, if your room is long, you will get better results with screens of the second or third groups.

It is best to remember that a small, bright picture is far more enjoyable than a large dull one. Assuming that you have a 2-inch projection lens, and the distance between projector and screen to be about 18 feet, the size of your picture should be about 30 x 40 inches. Based on the laws of illumination, at about half the distance your picture would be 15 x 20 inches and about four times as bright. D. S.

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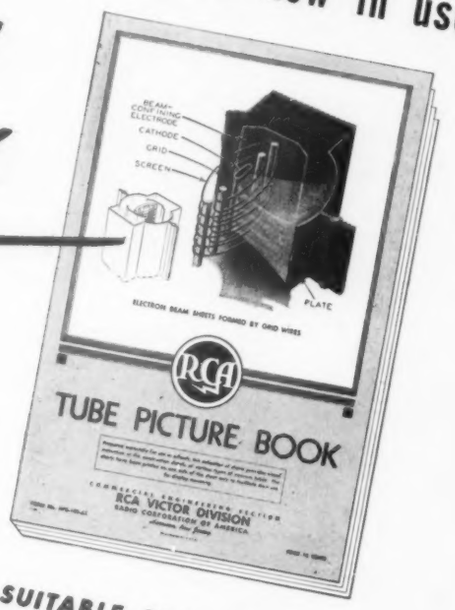

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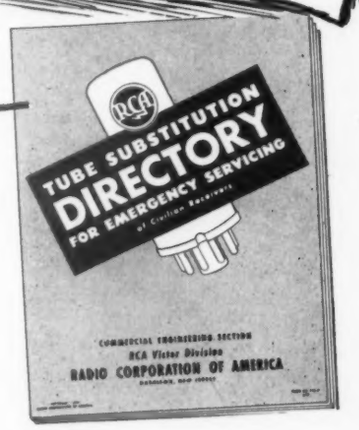

An indispensable aid when it becomes necessary to order replacement tubes for school radio or sound equipment.

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61-6H

THE NEW ENGLAND PAGE

Conducted by

The New England Section (Zone 1) of the Department of Visual Instruction of the National Education Association of the U.S.

Editor, JOHN H. LYONS

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Parent Education Through Visual Aids

by JOHN GAMMONS READ
Rhode Island Collge of Education, Providence

F we are to have our school children alert to changes in the world economic structure, their parents must be ready to change the family's concept of the place of the United States in a world brotherhood and world community. That community is in fact already here. We teach the children and wait for them to grow into senators and business men, statesmen and teachers. We must begin with their education now, and we must have parents prepare the way. A new idea, in this parent-conditioning, using the quick-teaching visual aid called an "Institute," is being used by Rhode Island College of Education.

The Geography-Science Departments sponsor a city or town Institute in cooperation with the school department of the place where the Institute is to be held. The theme is world community, achieved through a better knowledge, with the aid of geography, of the needs and problems of all countries. The community of all nations can be implemented, for the first time in history, if science is free to produce materials and have them move where they are needed.

On the evening of the Institute, after a mid-day professional meeting of all the teachers of the town, the parents come to the Institute. They find there exhibits on all phases of science, made by Rhode Island College of Education students, and by students of the local school system. Great quantities of reading material, from those companies all over the nation which have science or geographic backgrounds are available for free distribution to teachers and parents. Maps and posters from other countries cover the walls. Kodachromes are projected by consultants, high school girls who care for each exhibit. A survey has been made of the geographic and scientific environment of the town, and photographs are transferred to glass and tinted, then illuminated, museum-style, from behind. Local industries tell of their scientific and geographic backgrounds. High school students tell visitors about the industrial exhibits. There is no "selling" of products, but of ideas.

Then everyone goes to the assembly hall, to see movies of scientific advances being made; in industry and agriculture, to see how people live in far-off lands. Short explanatory talks by the professors of science and geography explain the purpose of those subjects and of the Institute. A pageant, that most effective aid for teaching the parents of children who appear in the stage presentation, depicts life in other lands. The orchestra and a singer show our debt in music to other days and other peoples. The College choir standing in front of a great map of the world, closes the program with folk-songs of all the world.

Visual aids are combined into a whole, doing that job that needs so desperately to be done soon—preparing our children and their parents for the hard road of peace. Try this new use of an old aid, famous for years as an educational method, used by Horace Mann and Henry Barnard, sweeping the country as the Chatauqua. We hope you'll find the same response that we have—throngs of parents coming into the schools to learn about the world today, to learn how to prepare for tomorrow.

Visual Aids in Industrial Training

THE important role visual aids can play in industrial training was demonstrated to our visual aids class recently, when the students viewed *Ships for Victory*, a thirty-minute, natural color sound motion picture, produced at the Bethlehem-Hingham Shipyard, Hingham, Massachusetts. The film highlights some of the streamlined mass production methods used in supplying the Navy with Destroyer Escorts. It shows how one of the country's largest shipyards met and solved training and construction problems under war time pressure, and followed through to establish shipbuilding records.

The visual aids sequence of the film points out that, "the use of slides, motion pictures, and filmstrips are important factors in the necessary streamlining of our training methods. These are an integral part of all the courses. Experienced operators project these pictures in the classrooms. The function of our film service has been expanded to include showings of safety, fire prevention, industrial incentive and official Navy films to our workers. Including training films, over seven thousand showings have been made. Visual aids have saved untold hours in teaching our workers. Over one-hundred training films have been secured from outside sources. This material did not demonstrate all required shipyard trades, so it was necessary to make our own pictures covering those subjects. Our staff is now prepared to handle all steps of production, from script to completed picture."

The production and twenty-mile radius distribution of such films are additional functions of the Visual Aids Division of the Training Department, Bethlehem-Hingham Shipyard, Inc.

Connecticut to Establish Safety Film Library

The Connecticut Highway Safety Commission is now making plans for the establishment of a Visual Education Film Library. This library will supply the schools of the State with the latest visual aids in the field of safety education. The services of this library will be free to all schools of the state. The plans also call for the library to supply projection equipment to those schools needing it for the use of these materials. The library is to be under the direction of William M. Greene.

New England Notes

Spring Meeting Cancelled. At a meeting of your Board of Directors held at the Hotel Lenox in Boston on April 1st, it was decided to cancel the spring meeting for this year. It is our plan to arrange for a meeting in the early fall.

▲ ▲

The Audio-Visual Aid Center of the University of Connecticut has a supplement to the regular catalogue. The supplement will list approximately 200 new films that have been added to the library within recent months. Included in this are more than 50 additional Erpi film subjects as well as a number of sound and silent films suitable for the elementary grades. This supplement will be available June 1.

▲ ▲

We would like to call your attention to the Geography-Science Bulletin, which is published monthly by the Rhode Island College of Education and edited by Professor John Gammons Reed. This bulletin should be of particular interest since it not only gives a considerable amount of information on Geographic and Science subjects but also devotes an entire section to the evaluation of new film releases and other teaching aids in these fields.

Now let's look at the effect of the weight of passengers and baggage on the airplane. When we speak of the weight of the airplane we generally refer to the GROSS WEIGHT. Gross weight includes the airplane itself, passengers, baggage, gasoline, oil, and everything else necessary for flight.

...the Airplane is in the Classroom!

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Pre-flight Aeronautics instruction is here to stay and Pilot Training in schools and colleges is here to stay. Military aviation, Civilian Transport and Freight Flights exceed the most optimistic expectations of 10 years ago and point the way to tremendous expansion of air facilities after the war with a corresponding increase in demand for Pre-flight Aeronautics training.

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The Literature in Visual Instruction

A Monthly Digest

ETTA SCHNEIDER RESS, Editor
New York University Film Library

PRODUCTION-UTILIZATION

Getting Underway—Lt. Francis W. Noel, USNR—*The School Executive* 63:29 February, 1944.

This is the first of a series of three articles on the use of audio-visual aids in the navy training program. It outlines the organization of the Training Aids Section in the Bureau of Naval Personnel, which was set up in the summer of 1942, thus giving recognition to the place of audio-visual instructional materials in training. The formation of this Section was most significant in that for the first time centralized overall direction of the Navy audio-visual education movement was possible. The enormous scope of its activities required the section to be organized into three sub-sections: (1) production planning and new development of aids, (2) distribution, and (3) utilization and evaluation.

Full Speed Ahead (part 2—p. 29, March) is concerned with the administration of the navy visual program.

The Training Film Section in the Bureau of Aeronautics provides the entire naval establishment with photographic training aids. It does not itself initiate production. All requests for production originate from some training activity, must be specific in terms of definite training needs, and must be approved by the Bureau of Naval Personnel. To date more than 250 million feet of 16mm positive film have been used for film-strip and motion picture subjects.

Smooth distribtuion has been achieved through training aids libraries established in each of the naval districts, naval training stations, and at foreign ports. An extensive utilization and evaluation program has also been developed. This is under the supervision of approximately one hundred utilization officers, experienced in the audio-visual education field, who are especially trained to carry out this part of the program.

Plotting a Course for Education (part 3— p. 45, April), which concludes this series, points out that the experiences gained from the Navy's training aids program, which is essentially the work of professional educational personnel serving as wartime officers, will have great significance in American education. The organization and development of this program is based upon principles derived from American educational experience during the years of peace. The Navy training aids program has not remained static. New ideas are constantly being put into practice, scientifically evaluated and continually improved. Lt. Noel discusses twenty-one implications of this development to education. "The first and probably the most significant implication is that after the war American education can look with confidence to its own ranks for personnel qualified to assume leadership in a sound post-war development of the audio-visual movement in the United States."

The Work of the Training Film Branch, Photographic Division, Bureau of Aeronautics, U. S. Navy—An Overview—Lt.. Orville Goldner, USNR, Head of Training Film Branch—*Journal of the Society of Motion Picture Engineers*, 42:71 February, 1944.

The Training Film Branch of the Navy is responsible for the procurement, production and distribution of training films for all activities of the Navy. Since its establishment in October, 1941, the Branch has supervised the production of approximately 2000 titles, including both slidefilms and motion pictures, covering every aspect of Naval training. It is organized into five sections, Procurement, Cataloguing, Distribution, Project Supervision, and Education, the functions of each of which are described. Two hundred persons —civilians, enlisted men and officers, work for the Branch. Facilities of commercial producers are used in addition to the Navy's own production laboratory at the Naval Air Station, Anacostia, D. C.

Other articles in this issue treating various aspects of the Training Film Branch activities are: "Production Planning for Navy Training Films," by Lt. R. B. Lewis, Senior Project Officer; "Making Films that Teach," by Lt. Reginald Bell, Head of Education Section; "The Training Film Program in Action—A Case History," by Howard E. Carr, Edward Nell, Jr., and Thornton Sargent, Lieutenants.

The Use of Films as a Teaching Aid—Robert E. Schreiber, Stephens College, Columbia, Mo.—*School Science and Mathematics*, p. 59 January, 1944.

Last year Stephens College used over 4,000 reels of motion pictures, which represented 800 hours of film showings, or 3.7 hours per day, allocated among the 300 classes which meet daily. The library and Visual Aids Office cooperate in informing instructors at Stephens as to what films are available to them. Assistance is also given the faculty in film selection, projection service, methodology and evaluation. Extensive card indices are maintained for the use of the faculty. Source cards giving the physical characteristics of the film and subject areas to which it is applicable, are filed alphabetically. From these cards, course—or, subject area—cards are made out for as many divisions of study as are indicated on the master form. These course cards are then sent to the Division Libraries throughout the campus. A file of course cards is also kept in the Visual Aids Office, classified according to subject areas. Following every film exhibition, evaluation cards are filled out by the instructors and filed with the corresponding course cards.

Another important function of the Visual Aids Office is the personal contact work to win over new converts to the idea of using films as a teaching aid. But, this accomplished, they do not consider the job done and forget about the new convert. He must be guided and stimulated until the use of films is firmly established as a part of the instructor's methodology.

DISTRIBUTION

16mm Exchange Practices—B. A. Aughinbaugh, Director Ohio Slide & Film Exchange, State Department of Education, Columbus—*Film and Radio Discussion Guide* 10:5 February, 1944.

"How to Stop Film Deletion by Customers" is the problem discussed in this second installment of Mr. Aughinbaugh's series of articles which began in January. (The first one, on "Unsatisfactory Reels," was reported in our March issue.) By embossing the beginning and end of every film splice made by the Exchange, customers' splices are detected readily. They are removed and a new one made. The deleted section is charged to the customer on a footage basis. This splice-marking system exposes those users who damage or remove scenes from the films.

"That Old Alibi: 'We Didn't Use It'" (p. 5, March) tells how to prevent arguments between the Exchange and customer as to whether a film was used or not. If for some valid cause, film is to be returned unused, there can be no reason for it to be opened. Most rental exchanges charge for films whether used or not, but that does not take care of possible damage assessments unless there is a damage insurance charge included in the rental. To meet this eventuality, the Ohio Exchange wraps a "one-time band" completely around the film and the inspector signs her initials over the pasted end in dry, indelible pencil. The band carries the warning that if the band is broken or the signature is blurred, the exchange will consider the film used.

(*Concluded on page* 218)

TESTING NOW!

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For over two years, thousands of AMPRO 16 mm. sound projectors have undergone gruelling tests—from arctic wastes to South Pacific jungles, on aircraft carriers, destroyers, submarines—under blazing sun and in subzero temperatures. Out of this cruel laboratory of war have come sturdy, practical 16 mm. projectors exceeding even prewar AMPRO efficiency. Today these "war-tested" AMPRO machines are being made now exclusively for the United Nations armed forces. *When peace comes—they will be available for increasing the effectiveness of visual education.* Write today for Ampro catalog of 8 mm. silent and 16 mm. silent and sound projectors.

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RESEARCH

Visual Instruction in the Teaching of the Secondary Sciences—Charles C. Graham, Berea College, Kentucky—*Science Education* 28: 25 February, 1944.

After quoting statements made by various educators, from Comenius to the present, concerning the value of the picture in the learning process, the author goes on to review very briefly seven investigations which have been made to determine the value of visual aids in teaching secondary science. Each of these studies showed that the experimental group, with which films or slides were used, learned more than the group taught by the ordinary classroom methods.

The writer recently made a sampling study of the teaching of general science in the secondary schools of forty-five schools located in ten states, with special emphasis on Kentucky, and found that 30% of them own 16mm silent motion picture projectors, 15.5% have 16mm sound, approximately 10% have 35mm projectors, and 44.4% own slide projectors. Teachers of science were found to make greater use of visual aids than do teachers of other subjects.

PERIODICALS

Electronics—*Building America*, vol. 9 No. 3. Department of Supervision and Curriculum Development of the National Education Association, 2 W. 45th St., New York.

The story of what electronics is, its importance on the war fronts, how it serves on the home front, and what it promises for the post-war world, is told in simple, non-technical language in this study unit. The story opens with the vital role that electronic devices are now playing on America's battle lines. The science of electronics is then briefly explained by means of non-technical text and several simple diagrams, making it easy for the uninitiated to grasp the basic principles involved.

The publication goes on to trace the historical development of electronics, and discuss its many applications—in the fields of communication and transportation, as a new working tool in industry, as a weapon against disease and accidents, and as a source of new marvels in the home.

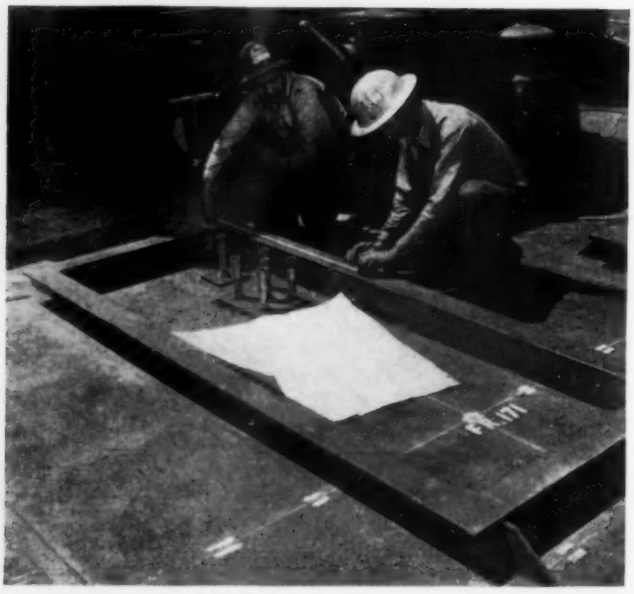
The story told in this publication together with the many photographs and graphic charts contained in it, presents a sufficiently broad picture of the field to enable readers to understand the immediate importance of electronics and of its possibilities in the post-war world.

Some New Releases of USOE Visual Units

BY releasing a new series of fifteen industrial training 16mm. sound films depicting marine construction, the U. S. Office of Education is helping to speed the program of the greatest shipbuilding year in the history of the country. These reels, coordinated with silent film strips and manuals, are additions to the ten motion pictures on shipbuilding skills already in use in navy and shipyards throughout the country.

Other new reels which have been completed and added to the visual unit groups are five films devoted to many phases of farm work, thirteen to machine shop work and eight to aircraft construction. With the increasing shortage of manpower in the rural areas it is believed that training films will prove of great assistance by the instruction given in the maintenance of farm machinery thereby safeguarding the food supply for members of the armed forces and the civilian population.

Scenes from "How to Check and Surface Foundations" one of the Shipbuilding series



Utilization of industrial training films in shipbuilding establishments is regarded as one of the important reasons why shipyards have been able to develop greatly enlarged staffs of capable workmen and produce good ships so rapidly. Federal statistics show that training periods are reduced by 30 to 50 per cent.

Produced under the supervision and direction of Floyde E. Brooker, visual aid director, U. S. Office of Education, the latest reels portray some of the intricate operations in shipbuilding, covering the installation of marine machinery, coppersmithing, pipe fitting and insulation. Among these are checking and surfacing foundations; aligning and installing auxiliary machinery; filing and installing chocks; laying out, drilling and tapping flanges on sea chest; installing valves and strainer on sea chest; laying out and installing stern tube, tail shaft, and propeller; bending copper tubing to a wire template; brazing flanges with spelter and silver solder; measuring pipe, tubing and fittings; cutting and threading pipe by hand and by machine; covering hot and cold pipes. Distribution is made through Castle Films, Inc., New York.

"These films, with supplementary animation and commentary, can be used repeatedly, for novices and others who are seeking advancement, for quick instruction and with the least delay in production," said Mr. Brooker. "They convey the knowledge of assembly steps, nomenclature, part identification, markings and supplementary erection procedures with equal clearness. The advantage of them in speeding up the country's war production is obvious."

The motion picture shows the job step by step. The filmstrip reviews, clarifies and supplements the motion picture. The instructor's manual ties motion picture and filmstrip together into an integrated visual training unit.

2 NEW KEYSTONE *Geography* UNITS

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by ZOE A. THRALLS

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A Map Slide of each area makes the pictorial slides of the units more meaningful.

1 GLIMPSES OF THE SOUTH SEA ISLANDS

Follow the Allied troops on the beaches and through the jungles.

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Where our fighting men live and prepare for the dash to Tokyo.

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Stereograph Unit of 25 Subjects, with Teachers' Manual and Case $6.25

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ENTERTAINMENT

... the Visual Way is the Best Way

WHETHER it's world affairs or home affairs . . . the war front or the political front . . . the thrills of your favorite sport in or out of season . . . travel in America or the four corners of the earth . . . or Hollywood's greatest stars in their greatest pictures . . . the motion picture is the great medium of expression!

Here are some of the outstanding dramatic, musical and comedy successes pronounced by leading motion picture critics as

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. . . the comedy team voted America's number one funny men in
WHO DONE IT
IT AINT HAY
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DONALD O'CONNOR
the people's own young favorite in
MISTER BIG
IT COMES UP LOVE
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CHIP OFF THE OLD BLOCK

DEANNA DURBIN
. . . great singing star in
THE AMAZING MRS. HOLLIDAY
HERS TO HOLD
HIS BUTLER'S SISTER

WHEN JOHNNY COMES MARCHING HOME
with Allan Jones, Phil Spitalny and His All-Girl Orchestra

GET HEP TO LOVE with lovely little **GLORIA JEAN**

And These Great Pictures Now Showing at Your Favorite Theatres

GUNG HO
the Story of Carlson's Marine Raiders on Makin Island

ALI BABA & THE FORTY THIEVES
Another Technicolor Fantasy of the Arabian Nights

FLESH AND FANTASY
Adventure in the Supernatural with an All-Star Cast

PHANTOM LADY
Based on the book that amazed millions; starring Franchot Tone, Ella Raines and Alan Curtis

UNIVERSAL PICTURES COMPANY, INC.

Rockefeller Center New York, N. Y.
CIRCLE 7-7100

The Coolidge Visual Aid Squad Functions

(*Continued from page* 199)

ters isn't taking any chances with his trainee. He insists on nothing less than perfection, for he doesn't want any embarrassment on the day of reckoning. When Witters is assured that his protegé is prepared to stand up for formal examination, he notifies the Chief Examiner, Norton Marshall. The Chief Examiner sets a date for the formal examination, posts the notice on the bulletin board, and cordially invites all members of the V. A. Squad, including myself, to grace the occasion with our presence.

The Formal Examination of Joe Neophyte

In the course of our three years existence a sort of ritual has evolved in the examination procedure. On the appointed morning, the Chief Examiner introduces the candidate, and comments with more or less flourish on the importance of the occasion. He then instructs his assistant to blindfold the candidate. The blindfolded candidate is lead to the box containing an unassembled silent movie projector, and is instructed to assemble same. If this part of the examination is completed successfully, the candidate is, given a practice film, and instructed to thread the machine with it. The candidate is still blindfolded. In the meantime, the Chief Examiner and his associates are doing their best to make things unpleasant for the candidate. They are applying what is known in our exclusive circle as "Under Pressure Routine". It takes a strong mind to ignore this deliberately induced bedlam. The tumult is supposed to simulate the occasional natural confusion that greets the candidate on his first projection assignments. I have attempted at times to intercede on behalf of Joe during the wilder moments of the "routine", when the barbaric incivilities on the part of the examiners seemed a trifle too severe, but I have been consistently brushed aside by the Chief Examiner, his assistants, associates, and even by the tormented examinee. The examiners refuse to tolerate any interference with a solemn tradition, and the tormented candidate insists on his prerogative to suffer the worst offered. When Joe finally demonstrates that he can thread the silent movie machine under pressure and blindfold, he is accorded a generous round of applause. At this point his blindfold is removed, and he is permitted to step up to the last hurdle in the examination.

He is instructed to assemble the sound movie machine. Since this is a more formidable bit of equipment than the silent movie machine, Joe is permitted to carry on without the handicap of the blindfold. It is only when Joe appears for his senior examination that he is required to assemble the sound machine under blindfold as well as under pressure. When Joe proves his skill with the sound machine, he is accorded a second round of applause, and is presented to me by the chief examiner for official certification. With due solemnity I read aloud the inscription on the certification card, (Form No. 6) and I accept Joe into our organiza-

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It is a physical impossibility to rip the screen fabric from the roller in raising the Challenger to desired height. Lifting the Challenger does *not* pull the fabric further from the case and thus necessitate moving up the case separately. All that is necessary is to release the spring latch and raise the extension support. The complete unit (case and screen) is thereby raised to the desired height, where it locks automatically. Positive and foolproof!

Only the Da-Lite Challenger offers these important *safety features* . . . The Challenger is one of many styles in the Da-Lite line of projection screens famous for quality for 34 years.

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Raising the Challenger does not change screen proportions. The picture area remains the correct size.

No Ripping of Fabric from the Roller!

When the screen fabric of the Challenger reaches the fully opened position, the extension support locks automatically in place, making it impossible to tear fabric from roller.

No Stooping! No Guessing!

In raising the Challenger to desired height, the exclusive inner-lifting device lifts the case, roller and fully opened screen as one unit and thus eliminates stooping and guessing about correct screen proportions.

tion with certain rights, privileges, etc. If Joe serves with sufficient merit for one semester as junior member, he will be qualified to apply for the senior examination. Incidentally, to inject a sad note, I might add that occasionally Joe fails to perform according to the rigid standards set up by the examining board. In such an event, both candidate and senior sponsor share alike in the humiliation. One can readily understand why the sponsor is so exacting during the training period of his protege. On such tragic occasions I have tried to intercede on behalf of the outraged candidate, but to the usual no avail. The sponsor may present his unsuccessful candidate for another trial on the following week. Fortunately, on the second trial the examiners are not without a vestige of mercy.

Special Assignments for the Squad Members

In addition to their regular projection responsibilities several of the squad members perform clerical duties in order to keep the program operating smoothly. The senior members instruct the juniors in the same manner described earlier in this article. We have special clerks to prepare the Confirmation Order, the Assignment Chart, and other small forms. The Inventory Clerk is responsible for the return and accounting of all equipment at the end of the day. The Technician checks for minor adjustments, splicings, etc. And our fair secretary handles correspondence within and outside the school. Acknowledgement is due to Mr. Paul Hahn of the Coolidge Printing Department. Mr. Hahn has two boys on his staff who do nothing but run off forms for the V. A. Office. Mr. Hahn has expressed nothing stronger than an occasional look of amazement.

Keeping the Squad Intact

It would be catastrophic if we had to re-organize the squad at the beginning of each semester because of the individual program adjustments. In order to keep the same operator assigned to the same period from one semester to the other, we submit to the assistant principal our request on Form No. 7. This request is honored wherever possible. We try to spread the membership of the squad in such a way as to retain representatives from all semesters, thus guarding against wholesale loss through graduation. To take care of the occasional replacements I am generally able to select a likely candidate from among my lower semester biology students. As usual, scholastic standing is a fair index of dependability, though occasional lesser academic lights make good also. If I am unable to find a student in any of my biology classes with the necessary free period, enthusiasm, or inclination, I make the rounds of the study halls assigned for that period and get my man. Sometimes I pick a mistake. Experience helps here. But by and large the Coolidge Projection Squad ranks as a hardy perennial.

NEW FILMS OF THE MONTH

As They Look to A Teacher Committee

L. C. LARSON, Editor
Instructor in School of Education
Consultant in Audio-Visual Aids
Indiana University, Bloomington

Assisted by CAROLYN GUSS and VIOLET COTTINGHAM
Extension Division
Indiana University, Bloomington

Care of the Feet

(Encyclopaedia Britannica Films, 1841 Broadway, New York) 11 minutes, 16mm. sound. Sale price $50.00 less 10% educational discount. Apply to producer for rental sources. Discussion guide available.

This film, divided into three major sequences, presents the new interpretation of the function of the feet and their accompanying disorders as developed by Doctor Dudley J. Morton of Columbia University.

The first part of the film is devoted to the anatomy of the foot, its bony structure, and the distribution and support of the body weight. By means of X-ray photography and diagram, the bones of the feet, ankles, and heels are shown while the commentator explains the relationship of one to the other. A live model illustrates how the weight of the body is shared equally by each of the feet; diagrams explain in greater detail how the weight is distributed to each metatarsal.

The second part of the film analyzes the two chief causes of foot discomfort. X-ray photography points out that the end of each metatarsal bone comes in contact with the ground in its weight bearing function. A short first or second metatarsal throws the distribution off balance, thereby causing pain, malformation, and callouses on the bottom of the foot. Flat feet are generally attributed to lax ligaments and weak muscles; Dr. Morton discredits this theory, asserting that weak bony structure causes the bones to shift out of position causing flat feet. The ligaments and muscles perform their chief function when they maintain equilibrium and institute or control body movements. Illustrations of these common disorders are shown.

The third part of the film deals with the general care of the feet, the wearing of proper shoes, and the importance of rest and relaxation to the comfort of the feet.

Committee Appraisal: The committee recommended the film for use by groups specifically trained in physiology and not particularly valuable to groups interested in practical suggestions on foot care since the terminology is very technical and the explanations concentrate on the physics of foot structure. The title would lead one to expect more emphasis on care of the feet, helpful exercises, and the wearing of the correct kind of shoes. Animated diagrams explain clearly the function of each part of the foot and the distribution of body weight to each part. Should be useful to physical education classes and foot doctors.

This monthly page of reviews is conducted for the benefit of educational film producers and users alike. The comments and criticisms of both are cordially invited.

Producers wishing to have new films reviewed on this page should write L. C. Larson, Indiana University, Bloomington, Indiana, giving details as to length, content, date on which the film was issued, basis of availability, prices, producer and distributor. They will be informed of the first open date when the Teacher Committee will review the films. The only cost to producers for the service is the cost of transporting the prints to and from Bloomington. *This Cost Must Be Borne By The Producers.*

The Bridge

(Coordinator of Inter-American Affairs, 444 Madison Avenue, New York and New York University Film Library) 33 minutes, 16mm. sound. Produced by Willard Van Dyke in cooperation with the Foreign Policy Association. Apply to distributors for a list of depositories and terms governing purchase.

A documentary film depicting the social and economic problems present in the various South American countries and suggesting that air transportation using the bridge of air which brings South America within sixty air-hours of the farthermost points is the solution to the problems.

The introduction to the film emphasizes the fact that South America is not one place but a thousand. A map and scenes of the palms at Natal, the harbor at Rio de Janeiro, the business district of Buenos Aires, the mountains and the jungles, the mighty Amazon, the soldiers' barracks at Caracas, and the extant remains of the Inca Empire impress upon one the diversity of geographical conditions and peoples present in South America.

Animated diagrams show that World War II has disrupted the pre-war trade triangle which existed with England and the United States and that the ends of the triangle—figuratively speaking—have coiled back on themselves and encircled and thus isolated South America. German, English and Italian ships are shown at a standstill in South American harbors. Month by month raw resources of cotton, coffee, wheat, and corn are piling up in South American warehouses. Or, even worse, are being left in the fields or used as fuel by furnaces in the factories. The United States doesn't need these products, Europe can't get them, and South America is unable to use them because of inadequate distribution facilities and a lack of industrial factories.

The fires of the few industries which burn in South America offer a possible solution to the problem. But nine out of every ten South American have never seen a mine or oil well and live by the labor of their hands. Among these people malnutrition and illiteracy prevail. Scenes show the deplorable conditions under which such people live and work.

Progress is being made in reclaiming vast tracts suitable for agricultural purposes, shifting from one crop to many, developing productive rubber trees, establishing transportation routes, and replacing manual labor by machine. The film ends with shots of a plane being loaded with manufactured products for South America and with the bright promise for the future that by using the bridge of air, South America will achieve economic and social development.

Committee Appraisal: A dynamic and dramatic film—artistically photographed and sincerely narrated—furnishes a wealth of material on the peoples, the problems, and the conditions in South America. Some may feel that the solution to South America's economic ills presented in the film is over-simplified. An excellent film for developing an appreciation of the whole of South America, and of the urgency for developing a functional Pan-American policy. Student and adult groups interested in South America will find this a stimulating and informative film upon which to base their study and discussions.

Abegweit

(National Film Board of Canada, 84 East Randolph Street, Chicago, Illinois) 11 minutes, 16mm. sound. Purchase price $15. Produced by Mrs. Margaret Perry for National Film Board, Ottawa, Ontario, Canada. Apply to distributor for rental.

As the commentator explains that the Prince Edward Island was originally known as Abegweit, an Indian name meaning "cradled on the waves," the film opens by showing that part of the island which juts out into the Atlantic Ocean. As the camera presents scenes of the shoreline and countryside, the commentator relates briefly the history of the island. Originally settled by the Indians, the French came in large numbers to fish. In 1758 the English took over the island and focused their activities on agriculture rather than fishing.

The remainder of the film is devoted to the varied activities of the island inhabitants. As men are shown busy at farming duties, the narrator relates that three fourths of the people are engaged in specialized farming of which field crops are the most important. A mother and daughter are shown cutting seed potatoes, a principal export of the island. Men are pictured at work in orchards, in the hay fields, and on the fox farms. Stock and poultry farms with their quality breeds are caught as the commentator explains that in 1925 the action which was taken to rid the island cattle of tuberculosis was successful. In most farming areas cooperative planning and marketing are used. While a rich living is gained from the land, the film also records the activities of the fishermen as they proceed to the fishing areas, haul in their catch, clean and sort the fish. Cooperative effort is again stressed.

The picturesque quality of the island is further enhanced as the film presents the "Ann" country—the green gabled house, the babbling brook, and the haunted wood.

The progress of the island is illustrated by scenes of the regional libraries first initiated by Carnegie but now controlled and supported by the towns. In this way new reading material reaches all parts of the island. The film ends with scenes of Charlottetown, the capital, and Summerside, the center of the fox fur industry.

Committee Appraisal: Excellent for providing impressions of resources, products, people, industries, historical background and legend, and a successful application of the cooperative movement. Should be useful for providing a background and information on the inhabitants and occupations of Prince Edward Island in classes in economics, geography, literature, history and in adult groups interested in cooperatives and specialized farming. Good protography and a sympathetic treatment of the subject combine to make this an interesting and enjoyable film.

Romance of the Gyroscope

(Sperry Gyroscope Company, Central Film Service, Great Neck, New York) 15 minutes, 16mm. sound. Apply to producer for rental sources and purchase price.

The film gives the history of the discovery of the gyroscope, the laws of physics governing its operation, and its practical applications in the realm of navigation.

Introductory scenes show that the idea of the rolling log led to the discovery of the wheel. Various types of wheels are shown—the ancient Greek, the Roman chariot wheel, a French Seventeenth Century wheel, an early American, and an English pneumatic. The commentator here points out that the transferring of power from one wheel to another caused the machine age to come into being.

Until forty years ago the gyroscope was only a toy. Scientists seeking to solve the mysteries of the rotation of the universe through space discovered the law of force. They found that a wheel at rest did not possess gyroscopic properties, but that the same wheel when spinning would resist a force endeavoring to change its plane of rotation. Leon Foucault, the first to perfect a spinning wheel which allowed him to observe the earth's motion, is shown

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using his discovery. He named it "gyroscope" derived from two Greek words meaning "to view evolution."

Demonstrations with a spinning top and a rolling hoop show two important properties of a wheel in action—rigidity in space or gyroscopic inertia and precision, the force applied to the axis of the gyroscope tending to change the plane of rotation.

Dr. Elmer A. Sperry, who incorporated these principles in his gyro-compass, is shown at work in his laboratory. Final scenes show practical adaptations of the gyroscope—battleships being automatically steered by the gyro-pilot and their courses charted by the gyro-compass the spinning axis of which is brought into line with the north-south axis of the earth.

Committee Appraisal: Good for demonstrating the principles of the gyroscope, its industrial application and its usefulness in modern warfare. Also provides the history of the discovery and development of the gyroscope. The film should be effective in developing an appreciation of the persistent effort devoted by scientists to their research and of the industrial progress achieved through application of scientific discoveries to industry. The committee recommended the film for high school and college use.

Series and Parallel Circuits

(Encyclopedia Britannica Films, Inc., 1841 Broadway, New York) 11 minutes, 16mm sound. Purchase price $50, less ten percent educational discount. Apply to producer for rental sources. Discussion guide available.

This film, divided into four major sequences, illustrates and explains series and parallel circuits. A series circuit with lamps as resisters in place is shown by a diagram as the commentator relates that the elements in the circuit are arranged to permit only one path for the current. Electrons in motion are shown. A parallel circuit is demonstrated by diagram as the commentator again explains that this is a divided circuit with branches, thus providing more than one possible path for the current. The rest of the first sequence is taken up with the explanation of how the electrons flow and the amperage decreases in the series circuit as more resisters or lamps are included. Using diagrams and equations, Ohm's law is applied.

The second sequence explains by the addition of resisters between conductors in a parallel circuit that the voltage across each branch of a parallel circuit is the same regardless of its resistance and each is equal to the source of the voltage. Equations are again employed to show that the total current flowing in a parallel circuit is the sum of the current flowing in the branch circuits. The total current increases in the parallel circuit as more resisters are added. Ohm's law is applied to any or all parts of the parallel circuit—a toaster, a lamp, and a soldering iron are used as practical examples.

The third sequence lists the advantages of the parallel over the series circuit. If any part of the series circuit is removed, the circuit is opened and no current can flow. A second chief disadvantage is that the voltage is different across each resister. Neither of these disadvantages is true of the parallel circuit; hence, it is possible to use equipment of a standard voltage.

The fourth and final sequence deals with the combination series-parallel circuits. Examples of the combination are the radio, the lamp-board, and the switch-board used for electrical controls.

Committee Appraisal: Excellent use of animation presents the flow of electrons along wires arranged in series and parallel circuits. The film should be useful in clarifying points not made clear by the lecture or laboratory demonstrations. The film is strong because of its unity of purpose. The only adverse criticism offered by the physics instructors was that insufficient time was devoted to showing the results on the meters and shifting from words in Ohm's law to symbols. Instructors teaching this unit to high school and college physics classes will find this film useful.

Audio-Visual Education Conference Los Angeles City Schools, March 24

THE first annual Audio-Visual Education Conference, sponsored by Dr. Vierling Kersey, Superintendent of the Los Angeles City Schools, and Mrs. Gertrude Rounsavelle, President of the Board of Education of the City of Los Angeles, was held March 24, 1944, at the Audio-Visual Education Section. Approximately 175 conferees gathered for the General Session. Dr. Raymond E. Pollich, Assistant Superintendent of the Los Angeles City Schools, and General Chairman of the Conference, introduced Mrs. Rounsavelle who in turn welcomed the group.

Superintendent Kersey presented many current teaching problems and the potentialities of the audio-visual program. He said in effect that the armed forces have taught us how to be successful in the war effort—that we can learn more, that we can learn it better, and that we can learn it faster, and that there need be no extraordinary cost in order to learn that way. Study has been made on why there has been this eminent success in getting more learning in shorter time with deeper meanings. It seems to center around the consolidation of the five factors of hearing, seeing, feeling, sensing and thinking. Are we ready to say to every teacher-training institution and to every teacher, that part of all teacher-training is the making of and the using of the best in audio-visual materials? The materials and their preparation and the knowledge of their meaning seem to be ahead of their use and the readiness to make increased use of them. Mr. Kersey closed with a challenge to all present to join in and pool ideas so that all could profit from the advances and conclusions of the others.

Following the General Session, five section meetings were simultaneously held in various rooms. The topics and the respective chairmen were as follows:

How Teaching is Improved by the Use of Audio-Visual Tools
Dr. Charles J. Falk, Assistant to the Superintendent, San Diego City Schools

Basic Equipment Necessary for an Adequate Audio-Visual Program
Dr. B. F. Enyeart, Superintendent, Burbank City Schools

Standards in the Selection of Radio Program Material for Classroom Use
Dr. W. K. Cobb, Superintendent of County Schools, Ventura

Audio-Visual Materials for Today and Tomorrow
Dr. Raymond E. Pollich, Assistant Superintendent, Los Angeles City Schools

The Contribution of Sponsored and Commercial Materials to the Audio-Visual Program
Mr. Bruce A. Findlay, Head Supervisor, Audio-Visual Education Section, Los Angeles City Schools

At the afternoon General Session the chairmen of the respective Section Meetings gave the conclusions and the pooling of ideas of their groups. Some of the conclusions were:

Teaching is improved if students and cadet teachers learn

(*Concluded on page 229*)

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News and

Sponsored Films to Get OWI Distribution

Privately sponsored non-theatrical motion pictures will be accepted for distribution by the Office of War Information Bureau of Motion Pictures on condition that they deal with war information themes, contain no advertising, and are important enough to be distributed through the regular OWI channels. Such films will be reviewed and selected by the Bureau, which will also cooperate on new productions by furnishing suggestions and background material for films pertaining to the war effort which non-theatrical film producers can submit to their clients. Screen credit will be given to the sponsoring company.

This new policy has been adopted to provide the OWI Bureau with a regular supply of films, which it has failed to get since Congressional abolition of film production by the OWI, and curtailment of production by other Federal agencies. It is reported that negotiations for this private film material have begun.

Psychological Cinema Register Taken Over By The Pennsylvania State College

The Psychological Cinema Register, formerly operated by Dr. Adelbert Ford of Lehigh University, has been purchased by The Pennsylvania State College, Pennsylvania, and will be resumed immediately. Editorial supervision of the Register shall be carried on by the Department of Education and Psychology, of the Pennsylvania State College, thus endeavoring to preserve the high professional standards under which Dr. Ford accepted and distributed films in psychology, physiology, psychiatry, and related fields. Dr. Bruce V. Moore, Head of the Department of Education and Psychology has appointed Dr. Edward B. van Ormer, Associate Professor of Psychology, to serve as editor of the Register. Dr. van Ormer has been engaged for the past four years in informal experimentation with the use of motion pictures in the teaching of educational and child psychology.

The business management of the Register will be in charge of Mr. I. C. Boerlin, Supervisor of Audio-Visual Aids Service at Pennsylvania State College. Under his direction the College now maintains a library for the rental of educational films and other audio-visual aids, a projection service for both campus and extension classes, and a 16mm. sound motion picture production unit engaged in the making of educational films.

Dr. C. R. Carpenter, Associate Professor of Psychology, and now on leave as a Captain in the First Motion Picture Unit of the Army Air Forces, was instrumental in initiating negotiations for the acquisition of the Register by The Pennsylvania State College. Dr. Carpenter is also chairman of the American Psychological Association's Audio-Visual Aids Committee. His experience in the production of films, both before and during the War, will be of assistance to the Registrar, with which he will be affiliated in an advisory editor's capacity.

In taking over the distribution of these films, The

Notes

Pennsylvania State College wishes first of all to be of service in the instructional phases of psychology, psychiatry, and related professions. Since the College operates a rental library of instructional films, it is planned to make the more popular films available gradually on a rental basis, thus being of service to smaller institutions who cannot afford the convenience of purchasing films.

Communications regarding submitting of new films should be addressed to the Editor, Edward B. van Ormer, The Psychological Cinema Register, Audio-Visual Aids Library, The Pennnsylvania State College, State College, Pa. Communications regarding purchase of films and possible rentals should be addressed to the Manager I. C. Boerlin.

Motion Pictures' War Role Theme of SMPE Meeting

Application of motion pictures to war needs was the dominant theme of the 55th semi-annual conference of the Society of Motion Picture Engineers, held in New York April 17-19. Thirty-six papers were presented by military men, motion picture engineers, and representatives of organizations allied with the film business.

A symposium on television highlighted the opening session. The second day of the conference was designated "Army-Navy Day," with officers of the armed forces leading discussions on training films and participating in a symposium on the United States Naval Photographic Science Laboratory, and another on Training Films by Training Film Branch, Bureau of Aeronautics, U. S. Navy.

Another topic selected for symposium discussion was 16mm. Standardization. Papers at the closing session included: "Some Notes on the Past, Present and Future of Educational Films," by L. C. Larson, Educational Film Library Association; "Practices in 16mm. Film Distribution," by Oscar E. Sams, Jr., Museum of Modern Art; and "The Teaching of Basic English by Means of Feature Films," by Betty Lloyd-Johnstone, Office of Strategic Services, Washington.

NAVED Film Damage Insurance

Film Exchanges which are members of the National Association of Visual Education Dealers, are now in a position to provide a special form of insurance for film damage to protect their customers from all such loss or damage to film while in transit to the renter or in use on their projectors. The charge for this insurance is nominal—10 cents for programs under one hour and 20 cents for longer programs.

Film users who have been forced to replace twenty-five to fifty feet of a film damaged while in their care have discovered that most film rental contracts previously placed the responsibility for all such loss or damage on the customer.

The insurance is underwritten by Aetna Insurance Company, but it is available only through members of the National Association of Visual Education Dealers.

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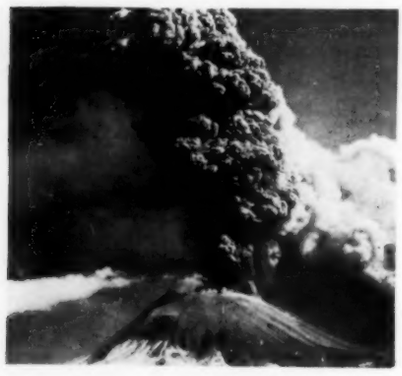
Current Film News

■ Castle Films, 30 Rockefeller Plaza, New York, have compiled several new film chapters in the important historical record of World War II, covering:

Fight for Rome and Russia's Smashing Offensive—both in the same reel. The landing at Anzio and the battle for the beachhead is seen. The destruction of the Nazi fortress in the ancient St. Benedictine Monastery is a feature of the film followed by one of the terrific artillery duels on the Cassino line. In the second half of the film Russia's combat photographers provide thrilling glimpses of the Red Army in action, in the most recent fighting on the Russian front. Heavy shells strike so close to these cameramen the concussion shakes their cameras, making such scenes momentarily unsteady.

Yanks Smash Truk offers a complete picture report of our great naval assault and victory at Truk, the Jap "Pearl Harbor." Practically the entire film is aerial photography. Navy cameramen ride with the air armada to photograph planes and runways on the ground as they are blasted to destruction. Jap planes disintegrating in mid-air, and bombs scoring hits on Jap ships in the sheltered lagoon of Truk.

Eruption of Vesuvius—another new Castle release—covers the recent eruption which is said to have been the most violent and destructive outburst of the historic volcano in the past seventy years. It is a thrilling spectacle of gigantic forces of nature in action. A brief sequence on Pompeii is also included with something of the scientific story back of volcanic activity. Fiery rivers of lava



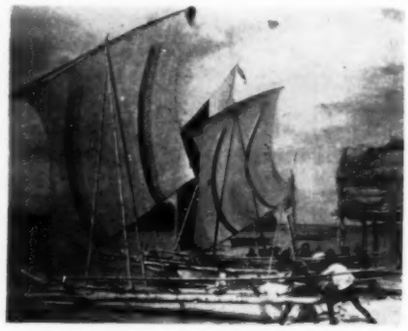
engulf whole towns and none of the efforts of the pepole to halt the flow has the slightest effect. The stricken people are forced to leave the doomed areas, but they always go back as the volcanic ash has fertilized the slopes of the mountain until the finest grapes can be grown there.

■ Y.M.C.A. Motion Picture Bureau, 347 Madison Ave., New York, has acquired the latest March of Time film on juvenile delinquency, called:

Youth in Crisis—2 reels—which depicts what is happening to our young people because of the disruptions and excitement of war, the mental and nervous instability of some of our draft-rejected young men, and "teen-age" flouting of parental authority. The film points out that environment can do much to build character, but when the family fails, society must step in. Just how effectively intelligent communities are going about solving this problem, makes an interesting climax to this subject. Service charge, $1.00.

■ Bell & Howell Co., 1801 Larchmont Ave., Chicago, have added the following subjects to their Filmosound Library:

Zamboanga—8 reels—a dramatic and authentic tale of the Moro pearl fisher-



men. An all-Filipino production, sounded in Tagalog with English over-titles.

The American Nile (11 min.)—presenting some astounding relics of dead Mayan civilizations along the Usumacinta River, separating Mexico and Guatemala, the supposed descendants of which are now the most backward people on our Continent. Filmed by Count Byron de Prorok.

■ British Information Services, 30 Rockefeller Plaza, New York, include two American-produced subjects, made by the Special Services Division of the U. S. War Department, in their latest list of new films, namely:

Know Your Ally: Britain (42 min.)—the first of a series describing the members of the United Nations. It tells of Britain's factories, rationing, part in Mutual Aid, drafting of men and women, life during Blitz, and role in the battles of this war.

The Battle of Britain—(53 min.)—authentic story of Britain during the tense period following the collapse of France, showing the first phase of Hitler's plan of attack in operation.

New British-made films are:

Man Wounded (18 min.)—how surgery and nursing have been brought up to the front line of the war; methods adopted to restore patients to good health again.

Highland Doctor (22 min.)—story of the famous Highlands and Islands Medical Service of Scotland; improved medical care of people in remote areas of Great Britain.

■ Walter O. Gutlohn, Inc., 25 W. 45th St., New York, announces that they have been authorized by the Bureau of Public Relations of the War Department to make available a selected list of U. S. Army pictures for showings to various groups including schools, churches, civic clubs, fraternal organizations, Chambers of Commerce, the American Legion, Veterans of Foreign Wars, and others. These films, which range from 6 minutes to 15 minutes running time, have hitherto been restricted to war plant showings.

The first releases represent a list of 16mm. sound motion pictures which contain many feet of actual combat taken by the daring, skillful cameramen of the Signal Corps, Army Air Corps, and other branches of the service.

Among the titles available are *War Department Report, Film Communique No. 2, Film Communique No. 3, Landing in Sicily, Bombers Over North Africa, Battle of Midway, Channel Fortifications, Army Service Forces,* and *Prelude to War.*

The Gutlohn organization has the contract to distribute the U. S. Army films in the following states only: New York, Maine, Virginia, Georgia, North Carolina, Louisiana, Kentucky, Connecticut, Vermont, West Virginia, Alabama, South Carolina, Mississippi.

Gutlohn has acquired the Hoffberg release, *Norway Replies,* in 16mm for distribution from its New York headquarters and its branch libraries throughout the country. It is available for rental or sale.

■ Pictorial Films, Inc., R.K.O. Building, New York City, released this month the sixth film in the RKO series, *This Is America,* entitled:

Medicine on Guard—dealing with the important role played by physicians at home who protect the health of the men in the mines or on production lines. In Waverly, a war town, a strange malady breaks out. Science's new machines and Dr. Pritchard combat and destroy this enemy of the home front, thus making one further triumph for medicine on guard in America.

■ Hoffberg Productions, Inc., 620 Ninth Ave., New York, are releasing 16mm and 35mm prints of an authentic documentary giving the first official story of Norway's great contribution to the fight against Fascism, under the title:

Norway Replies—6 reels produced under the supervision of the Royal Norwegian Information Service. Against the background of a dramatic narrative spoken by three of America's leading announcers—Ed Thorgersen, Alois Havrilla and Ben Grauer—is told the saga of a brave country's continued battle against the Nazi invaders. Norway's merchant marine, the third largest in the world, has played an important role in making it possible for Allied troops to score repeated successes against the enemy. The full story of Norway's heroic role in World War II is told for the first time in a dramatic tale of a young Norwegian

(Concluded on page 230)

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FILMCRAFT PRODUCTIONS

Division of
SOUNDIES DISTRIBUTING CORPORATION OF AMERICA INC.
203 W. Jackson Blvd. Chicago 6, Illinois

Audio-Visual Education Conference

(*Concluded from page 225*)

to use audio-visual materials in Universities and State Colleges.

Administrators should become familiar with available materials and should continue to stimulate and to encourage teacher interest in this field by checking with teachers to see what uses can be made of available materials in the schools.

Lighter weight equipment must be developed. Also, new equipment will be such that it will not be necessary to darken rooms when showing films.

Physical handicaps—due to lack of budget set aside for audio-visual education purposes—impede progress of utilization of audio-visual programs. Teacher interest dies if participation in a program cannot be carried out because of lack of equipment or other inconveniences.

More pooling of audio-visual materials between school districts would be helpful. Teachers will not use materials when it is too difficult to get them.

Radio materials for classroom use must be consistent with the curricular purposes of the school and of the classroom; must be authentic in content, and should have something more to offer than the classroom teacher can offer. The program should be clear and comprehensive to listening students, and should stimulate correct English usage. Transcriptions may serve the purpose better than direct radio programs, as the transcription is made in special studios and is more accurate.

It would be helpful for all teachers if a clearing house were set up where administrators, teacher groups, and researchers could pool their findings for the benefit of all.

Institutes are helpful in making teachers conscious of the use and advantages of audio-visual materials. Unless the audio-visual program has the support of the school administrators, nothing much can be done to further the cause of audio-visual education as rapidly as it should be.

There is no particular rule of thumb which can be used with any success so far as sponsored materials are concerned. Textbooks carry acknowledgment of all persons who help to write the book, and the books are accepted if the content is good despite these acknowledgments. Why shouldn't our films carry names, too, if it is done in propriety. The school journey to private concerns is universally accepted; why not the sponsored materials?

Organizations manufacturing audio-visual materials should avail themselves of the knowledge of educators connected with the particular field for which they are making slides, films, or audio-visual materials.

Miss Elizabeth Sands, Assistant Superintendent of the Los Angeles City Schools, led the panel discussion "Administering an Audio-Visual Program in the Elementary, Junior High, and High Schools." Many worthwhile points were brought out at this panel. It was concluded that among the things needed in most schools are: wider acquaintance with available resources; increased awareness on part of teachers of the value of audio-visual materials and willingness and ability to use them; increased facilities; space for proper storing of materials; proper organization and management of the program, and careful planning.

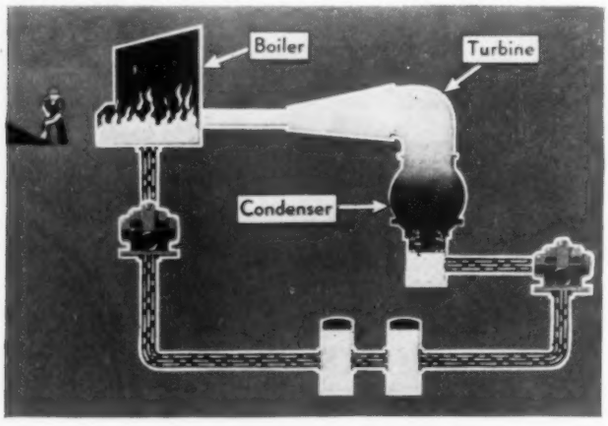
A "snack preview," presenting the highlights of various types of audio-visual materials followed the panel. The preview was concluded by the showing of a picture, "Education a la Carte," which was directed, photographed, and narrated by members of the Audio-Visual Education Section of the Los Angeles City Schools. The picture deals with the Agricultural Mobile Unit of the Vocational Section which "brings the country to the boy."

(*Concluded from page* 228)
who escapes from his captive homeland to England, where he wins his wings and returns with a bomber squadron to wreak vengeance on the Nazis.

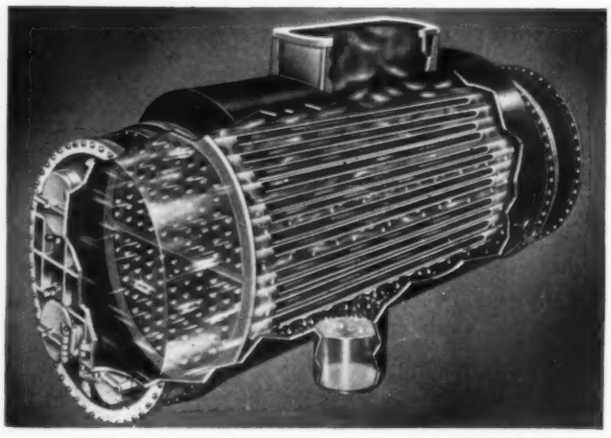
■ THE JAM HANDY ORGANIZATION, 2900 E. Grand Boulevard, Detroit, last year produced for the Allis-Chalmers Mfg. Co., Milwaukee, Wisconsin, the first of a series of educational sound motion pictures on the construction and operation of the modern steam turbine. Production has now been completed on the second picture in this Magic of Steam series,

Inside a Surface Condenser—18 min. running time. This subject, like its predecessor, is available for free loan to any institution, industry or other group interested. Each complements and supplements the other, though each is complete in itself. In both films technical animation has been freely used to delineate parts and functions of the modern turbine power plant, supplemented with motion photography. The condenser film, for instance, establishes the principle of condensation by means of simple closeup laboratory experiments showing that warm vapor plus cool surface equals condensation. There are many animation sequences with cutaway housing showing the condenser performing its functions. Both films have been designed as aids to the instruction of students in the basic principles of this efficient type of power plant.

For details regarding the free loan of 16mm prints of either or both subjects write the Public Relations Department, Allis-Chalmers Mfg. Co., Milwaukee, Wis.



Simple power cycle showing how the condenser fits into a power plant, and how it increases efficiency.



Animated sequence shows the condenser chamber and steam condensing on the tube surfaces.

■ OFFICE OF WAR INFORMATION, Bureau of Motion Pictures, Washington, D. C., is aiding in the WAC Recruiting Drive by depositing with its distributors 16mm prints of a new film made by the Signal Corps, War Department, titled:

It's Your War Too—1 reel—showing how effectively the WACs are serving along side of men in a wide variety of fields both here and overseas. It calls attention to the tremendous possibilities the service offers for personal and professional advancement. General Marshall pays tribute to the WACs and points to the acute need for more women to join the ranks now.

Another subject made available this month through the courtesy of the Office of Price Administration, is called:

Prices Unlimited—1 reel—a powerful presentation of what would happen to prices in this country if we did not have rationing.

Entertainment Releases in 16mm

■ WALTER O. GUTLOHN, INC., 25 W. 45th St., New York, have released:

Here We Go Again (Universal)—a farce comedy with all-star cast that includes Fibber McGee and Molly, Edgar Bergen and Charlie McCarthy, Ginny Simms, Ray Noble and his orchestra.

Pack Up Your Troubles—a Hal Roach comedy with Laurel and Hardy cast as misfit privates who bungle their way through the Army in a hilarious manner. Other feature length comedies, starring these two comedians, which have been made available by Gutlohn are *Pardon Us, Sons of the Desert, and Beau Hunks.*

Get Hep to Love (RKO)—featuring Gloria Jean and Donald O'Connor. The story centers around the adventures of a youthful concert star who wearies of it all and runs away.

■ COMMONWEALTH PICTURES CORPORATION, 729 Seventh Avenue, New York (19) report the following two Walter Wanger feature releases in 16mm sound:

Slightly Honorable—9 reels—described as a sophisticated and amusing story, coupled with a mystery plot. Pat O'Brien is the star.

Eternally Yours—11 reels—a gay comedy of romantic complications. Scenes of entertaining feats of magic are performed by the hero, "The Great Arturo," played by David Niven. Co-starring is Loretta Young.

Commonwealth controls exclusive world-wide distribution rights to these productions. In Chicago they are offered for rental through Ideal Pictures Corporation.

DeVry Contest Awards

War Bond Awards in DeVry Corporation's 1944 Motion Picture Camera & Projector Design Competition, have been announced. Winners include several members of the armed forces, three Canadians, and an occupational variety typical of the universality of the growing interest in motion pictures as a hobby.

"Details of the prize winning designs and mechanical suggestions," explains DeVry President William C. DeVry, "must await V-Day and the resumption of civilian motion picture camera and projector manufacture. It can be said, however, that the designs, ideas and suggestions submitted indicate keen interest in and definite opinions regarding post-war's motion picture equipment, particularly in the amateur field."

To George J. Heim, of 3330 North 11th Street, Milwaukee, Wisconsin, went first prize for the best motion picture camera design. To Frederick Arthur Amster, of 3515 Bunker Hill Rd., Mt. Rainer, Md., went first prize for the top projector design. Heim is a machinist; Amster a motion picture animator.

For camera design, Douglas G. Sites, of Havre de Grace, Md., a civilian gunner at the Aberdeen Proving Grounds, won second prize. To Robert C. Denny, 750 Vassar Avenue, Fresno, California, an electrical operating engineer, went third prize. Second prize for projector design went to Jewell (Bud) J. Mulkey, of 1116 Third Street, Fairbury, Nebraska, a radio service man. Third prize for projector design went to Private Irving Krauss, whose home address is 1312 Sheridan Avenue, New York, N. Y., but whose present whereabouts is a military secret. Ten additional awards were made for camera mechanical refinement suggestions and an equal number for projector mechanical refinement suggestions.

Additional Valuable Literature –

"1OOO AND ONE"—The Blue Book of Films

"1OOO and ONE" The Blue Book of Non-Theatrical Films, published annually is famous in the field of visual instruction as the standard film reference, indispensable to film users in the educational field. The **CURRENT, NINETEENTH EDITION** lists and describes **over 5,000 films,** classified into 176 different subject groups (including large groups of entertainment subjects). A valuable feature is a complete alphabetical list of every film title in the directory. Other information includes designation of whether a film is available in 16mm, or 35mm, silent or sound, number of reels and sources distributing the films, with range of prices charged.

136 pp. Paper. Price **75c.** (**25c** to E. S. Subscribers)

FILM EVALUATION SUPPLEMENTS TO "1000 and ONE" under The National Film Evaluation Project

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Each Supplement consists of 50 standard-size library cards carrying detailed evaluations of 50 films, based on combined scores of 15 or more teachers on each film. Three Supplements have appeared to date. Another appears as soon as 50 more films attain their quota of 15 or more scores.

Price per Supplement—50 cards in carton, serially numbered 1 to 50, 51 to 100, 101 to 150, etc., with full explanations accompanying, 50 cents (postpaid if cash with order.)

THE AUDIO-VISUAL HANDBOOK (4th Edition) By Ellsworth C. Dent

Presents in convenient form, practical information for those interested in applying visual and audio-visual aids to instruction. The six chapters include discussions on "The Status of Visual Instruction," "Types of Visual Aids and Their Use," "Types of Audio-Visual Aids to Instruction," "Types of Sound Aids for Schools," "Organizing the Audio-Visual Service," "Source List of Materials and Equipment."

212 pp. Illus. Cloth. Price **$1.75**

AUDIO-VISUAL AIDS TO INSTRUCTION By Harry C McKown and Alvin B. Roberts

A practical volume which shows the teacher and administrator how to select, organize, and utilize audio-visual aids of all types, in all subjects, and at all levels, from kindergarten through the twelfth grade. Primary emphasis is on actual practice and every effort has been made to include specific information and advice which will be most helpful in the classroom. 384pp. Cloth. Illus. Price $3.00

PICTURE VALUES IN EDUCATION By Joseph J. Weber, Ph. D.

Presents in unusually interesting form the results of the extended investigations on the teaching values of the lanterr slide and stereograph. 156 pp. Cloth. Illus. Price **$1.0C**

(67c to E. S. subscribers)

AN ALTERNATIVE FOR REVOLUTION AND WAR By Albert E. Osborne.

A stimulating, wide-range view of the higher potentialities of visual instruction in promoting world harmony by a "more humanity-centered education." A pertinent reply to H. G. Well's dictum that the "future is a race between education and catastrophe." 124 pp. Cloth. Price **$1.25.**

EVALUATION OF STILL PICTURES FOR INSTRUCTIONAL USE. By Lelia Trolinger

A full presentation of the latest piece of research on determination of teaching values of pictures. Development of the Score Card and elaborate experiment in use of same. Full documentation, tabulation of results, and appendices. The latest, most complete and scholarly investigation of a problem in the visual teaching field that has long needed such a solution. 48 pp. Paper. Illus. Price **50c.**

PRODUCING SCHOOL MOVIES By Eleanor Child and Hardy R. Finch

Based on first-hand experiences of the authors and those of many other teachers and movie enthusiasts. Chapters are "Organization (of a Club); Choosing the Idea; The Scenario; Buying Equipment; Using the Equipment; Filming the Picture; Advanced Techniques; Final Preparation and Showing. A welcome book to those who want movie-making explained in simple terms. 151 pp. Paper. Illus. Price **$1.50.**

SELECTED FILMS FOR AMERICAN HISTORY AND PROBLEMS. By William H. Hartley

Part I gives directions for obtaining, evaluating and utilizing films. Part II comprises a fully annotated catalog of the most useful films for illustrating various aspects of American Civilization. Title of film, length, whether sound or silent, production date, producer, sale and rental price and grade level suitability, are given. Also synopsis of film content. Suggestions are offered concerning most effective application of the film to the teaching situation.

275 pp. Cloth. Price $2.25.

THE USE OF VISUAL AIDS IN TEACHING By Ella Callista Clark, Ph. D.

Brief, clear, concise, authoritative. An attractively printed manual of procedure for all visual aids in teaching, with stimulating suggestions for the inexperienced teachers as well as for the veteran.

24 pp. Paper. Illus. Price **25c.**

HOW TO MAKE HAND-MADE LANTERN SLIDES By G. E. Hamilton

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1425 Williams St., Denver, Colo.

Bailey Film Service (3)
1651 Cosmo St., Hollywood, Calif.

Bell & Howell Co. (3)
1815 Larchmont Ave., Chicago, Ill.
(See advertisement on page 193)

Brandon Films (3)
1600 Broadway, New York, N. Y.
(See advertisement on page 223)

Bray Pictures Corp. (3, 6)
729 Seventh Ave., New York, N. Y.

Castle Films (2, 5)
R C A Bldg., New York, N. Y.
(See advertisement on page 189)

Central Education Association (1)
123 S. Washington St.,
Green Bay, Wis.

College Film Center (3, 5)
84 E. Randolph St., Chicago, Ill.

Community Movies (3)
1426 W. Washington St.
Charleston 2, W. Va.

Creative Educational Society (1)
4th Fl., Coughlan Bldg.
Mankato, Minn.

DeVry School Films (3)
1111 Armitage Ave., Chicago, Ill.
(See advertisement on page 190)

Eastman Kodak Stores, Inc. (3)
Kodascope Libraries
356 Madison Ave., New York, N.Y.

Encyclopaedia Britannica Films, Inc.,
1841 Broadway, New York 23 (3, 5)
(See advertisement on page 224)

Films, Inc. (3)
330 W. 42nd St., New York, N. Y.
64 E. Lake St., Chicago
314 S. W. Ninth Ave., Portland, Ore.

Fryan Film Service (3)
2nd Floor, Film Building
Cleveland, Ohio

General Films, Ltd. (3, 6)
1924 Rose St., Regina, Sask.
156 King St. W. Toronto

Walter O. Gutlohn, Inc. (3)
25 W. 45th St., New York, N. Y.
(Se advertisement on page 227)

Hoffberg Productions, Inc. (2, 5)
618-20 Ninth Ave., New York, N. Y.

Ideal Pictures Corp. (3, 6)
28 E. Eighth St., Chicago, Ill.
(See advertisement on page 196)

Institutional Cinema Service (3)
1560 Broadway, New York 19, N. Y.

Knowledge Builders Classroom Films
625 Madison, New York, N. Y. (2, 5)

Mogull's Inc. (3)
68 W. 48th St., New York 19, N. Y.

National Film Service (2)
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309 E. Main St., Richmond, Va.

Nu-Art Films, Inc. (3, 6)
145 W. 45th St., New York 19, N. Y.

Post Pictures Corp. (3)
723 Seventh Ave., New York, N. Y.

The Princeton Film Center (2)
55 Mountain Ave., Princeton, N. J.

Swank's Motion Pictures (3)
620 N. Skinker Blvd., St. Louis, Mo.
(See advertisement on page 226)

Universal Pictures Co., Inc. (2, 5)
Rockefeller Center, New York City
(See advertisement on page 220)

Visual Education Incorporated (3)
12th at Lamar, Austin, Tex.

Vocational Guidance Films, Inc. (2)
2718 Beaver Ave., Des Moines, Ia.

Williams, Brown and Earle, Inc. (3, 6)
918 Chestnut St., Philadelphia, Pa.

Y.M.C.A. Motion Picture Bureau (3)
347 Madison Ave., New York, N.Y.
19 S. LaSalle St., Chicago
351 Turk St., San Francisco, Cal.
1700 Patterson Ave., Dallas, Tex.

MOTION PICTURE PROJECTORS and SUPPLIES

The Ampro Corporation (3)
2839 N. Western Ave., Chicago, Ill.
(See advertisement on page 217)

Bell & Howell Co. (3)
1815 Larchmont Ave., Chicago, Ill.
(See advertisement on page 193)

Central Education Association (1)
123 S. Washington St.,
Green Bay, Wis.

Community Movies (3)
1426 W. Washington St.
Charleston 2, W. Va.

DeVry Corporation (3, 6)
1111 Armitage Ave., Chicago, Ill.
(See advertisement on page 190)

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Holmes Projector Co. (3, 6)
1813 Orchard St., Chicago, Ill.
(See advertisement on page 224)

Ideal Pictures Corp. (3, 6)
28 E. Eighth St., Chicago, Ill.
(See advertisement on page 196)

Mogull's Inc. (3)
68 W. 48th St., New York 19, N. Y.

Radio Corporation of America (2)
Educational Dept., Camden, N. J.
(See advertisement on page 213)

Ralke Company (2)
829 S. Flower St., Los Angeles 14, Cal.

S. O. S. Cinema Supply Corp. (3, 6)
449 W. 42nd St., New York, N. Y.

Victor Animatograph Corp. (3)
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(See advertisement on inside front cover)

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Williams Brown and Earle, Inc. (3 6)
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SCREENS

Da-Lite Screen Co., Inc.
2723 N. Crawford Ave.,
Chicago 39, Ill.
(See advertisement on page 221)

Mogull's, Inc.
68 W. 48th St., New York 19, N. Y.

National Film Service
14 Glenwood Ave., Raleigh, N. C.
309 E. Main St., Richmond, Va.

Radiant Mfg. Company
1144 W. Superior St.,
Chicago 22, Ill.
(See advertisement on page 195)

Society for Visual Education, Inc.
100 E. Ohio St., Chicago, Ill.
(See advertisement on outside back cover)

The Stanley Bowmar Co.
2929 Broadway, New York 25, N. Y.

Williams, Brown and Earle, Inc.
918 Chestnut St., Philadelphia, Pa.

SLIDEFILMS

Society for Visual Education, Inc.
100 E. Ohio St., Chicago, Ill.
(See advertisement on outside back cover)

The Jam Handy Organization
2900 E. Grand Blvd., Detroit, Mich.
(See advertisement on page 215)

The Stanley Bowmar Co.
2929 Broadway, New York 25, N. Y.

Visual Sciences
Suffern, New York
(See advertisement on page 226)

Williams, Brown and Earle, Inc.
918 Chestnut St., Philadelphia, Pa.

SLIDES (KODACHROME 2 x 2)

Elsie Cross
1305 Lombard, San Francisco, Cal.
(See advertisement on page 226)

C. Edward Graves
P. O. Box 37, Arcata, Calif.

Klein & Goodman
18 S. 10th St., Philadelphia, Pa.

Society for Visual Education, Inc.
100 E. Ohio St., Chicago, Ill.
(See advertisement on outside back cover)

The Stanley Bowmar Co.
2929 Broadway, New York 25, N. Y.

SLIDES (STANDARD 3¼ x 4)

Ideal Pictures Corp.
28 E. Eighth St., Chicago, Ill.
(See advertisement on page 196)

Keystone View Co.
Meadville, Pa.
(See advertisement on page 219)

Radio-Mat Slide Co., Inc.
222 Oakridge Blvd.
Daytona Beach, Fla.
(See advertisement on page 226)

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Bausch and Lomb Optical Co.
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(See advertisement on inside back cover)

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(See advertisement on page 225)

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(See advertisement on page 219)

Society for Visual Education, Inc.
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REFERENCE NUMBERS

(1) indicates 16mm silent.
(2) indicates 16mm sound.
(3) indicates 16mm sound and silent.
(4) indicates 35mm silent.
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(6) indicates 35mm sound and silent.

Continuous insertions under one heading, $2.00 per issue; additional listings under other headings, $1.00 each.